



**Government of Odisha
Special Relief Commissioner
Revenue and Disaster Management Department**

**ANNUAL REPORT
ON
NATURAL CALAMITIES
2021-22**

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Introduction

The Special Relief Organization was created under the Board of Revenue in 1965-66 for relief and rescue operation during and after occurrence of various natural calamities. Now it is functioning as a composite department after integration with the Revenue and Disaster Management Department. Since its inception, the scope of Relief Organization has been diversified. Now it deals with disaster management i.e. responsibility of prevention, mitigation, preparedness, response, relief and rehabilitation in connection with natural disasters. It co-ordinates with districts/departments for quick relief and rescue operation, reconstruction and rehabilitation work. It also promotes disaster preparedness at all levels in the State with the assistance of Odisha Disaster Mitigation Authority (OSDMA). Quick response in the natural calamities is the hall-mark of Special Relief Organization. The State Emergency Operation Centre is functioning round the clock at Rajiv Bhawan, Bhubaneswar with state of art communication network.

The Organization headed by the Special Relief Commissioner (SRC) exercises all administrative and financial powers as Secretary to Government, Disaster Management. He is assisted by a group of experienced officers and staff. During any natural disaster, the office functions round the clock in an emergency mode.

The State being one of the most vulnerable to various natural disasters has encountered one or other severe calamities each year since 1994. Recurrence of repeated disasters has no doubt negated the developmental progress in the State. But Special Relief Organisation is striving hard to mitigate the impact of such disasters and keep the loss of life and property to the minimum through quick response mechanism. Since supercyclone'99 a paradigm shift has been made in the approach to disaster management and auto triggered response mechanism has been put to place from GP level to State level. The result of this has been felt during the recent years.

The Indian government strives to promote a national resolve to mitigate the damage and destruction caused by natural and man-made disasters, through

sustained and collective efforts of all Government agencies, Non-Governmental Organizations and People's participation. This is planned to be accomplished by adopting a Technology-Driven, Pro-Active, Multi-Hazard and Multi-Sectoral strategy for building a Safer, Disaster Resilient and Dynamic India. Accordingly, the government of Odisha successfully managed to minimize the loss of life and working on Zero Casualty Mission which has now turned into "every life is precious"; this itself was not a small exercise and required tremendous effort. However, the state still suffered major losses in terms of infrastructure, particularly electrical infrastructure, housing, public buildings, transport infrastructure, including airports and railway stations, and also port and harbor areas.

The Government of Odisha certainly investing in creating disaster resilient housing especially in the coastal regions, and in creating electrical systems that are underground. This will not only help minimize the need for evacuation, but also save on the systematic investments that are made when household assets are lost during a disaster.

CHAPTER-1

Profile of the State

Sl. No.	Name of the District	Total Land Area (Sq. Km.)	Number of Villages (2011 Census)	Population (in '000)	Literacy Rate (in per cent)	Gross Cropped area (in '000 ha.)	Rivers	Normal Annual rainfall (mm)
1	2	3	4	5	6	7	8	9
1	Angul	6375	1871	1272	78.96	285.14	Brahmani, Mahanadi	1401.9
2	Balasore	3806	2932	2317	80.66	326.65	Subarnarekha, Budhabalang, Jalaka, Swarna	1592.0
3	Baragarh	5837	1206	1479	63.99	443.09	Mahanadi, Zira, Anga	1367.3
4	Bhadrak	2505	1312	1507	83.25	229.39	Baitarani, Salandi	1427.9
5	Balangir	6575	1783	1648	65.50	434.08	Hati, Suktel, Rahul	1289.8
6	Boudh	3098	1187	440	72.37	130.17	Mahanadi, Tel, Salanki, Bagh, Mehurni	1623.1
7	Cuttack	3932	1952	2619	84.20	309.73	Mahanadi, Devi, Kathajodi, Birupa, Kuakhai, Sidua, Luna,	1424.3
8	Deogarh	2940	878	312	73.07	94.74	Bramani	1582.5
9	Dhenkanal	4452	1208	1193	79.41	235.13	Bramani, Ramiyal	1428.8
10	Gajapati	4325	1612	576	54.29	131.66	Bansadhara	1403.3
11	Ganjam	8206	3195	3520	71.88	617.94	Rusikulya, Badanadi, Baghua, Dhanej, Loharakhandi, Ghodahada, Kokalaba, Bahuda	1276.2
12	Jagatsinghpur	1668	1292	1137	87.13	70.97	Biluakhai, Paika, Mahanadi, Devi, Hansua.	1514.6
13	Jajpur	2899	1783	1826	80.44	258.60	Baitarani, Brahmani, Budha, Kharasrota, Birupa	1559.9

14	Jharsuguda	2081	351	579	78.36	81.87	Ib, Veden	1362.8
15	Kalahandi	7920	2253	1573	60.22	542.74	Hati, Indravati, Tel, Reta, Vamsadhara, Chandola, Utei.	1330.5
16	Kandhamal	8021	2587	732	65.12	163.34	Rahul, Salunki,	1427.9
17	Kendrapada	2644	1547	1440	85.93	254.26	Brahmani, Hansua, Kharasrota, Luna, Chitrotpala, Paika, Karandia	1556.0
18	Keonjhar	8303	2123	1803	69.00	371.67	Baitarani	1487.7
19	Khordha	2813	1534	2246	87.51	162.42	Kusabhadra, Bhargavi, Daya	1408.4
20	Koraput	8807	2042	1377	49.87	355.38	Kolab, Ultajharan, Champabati, Jhanjabati	1567.2
21	Malkanagiri	5791	1055	613	49.49	186.99	Saberi, Sileru, Guru, Priya Kalam, Taptadhara	1667.6
22	Mayurbhanj	10418	3950	2514	63.98	449.50	Kala, Budhabalang	1600.6
23	Nawaranghpur	5291	891	1219	48.20	261.60	Indravati, Tel, Vaskel	1569.5
24	Nayagarh	3890	1692	962	79.17	190.29	Mahanadi, Brutanga, Kaligiri, Kusumi, Malaguni, Budha Budhari, Kuairia	1354.3
25	Nuapada	3852	668	606	58.20	269.72	Udanti, Jalka	1286.4
26	Puri	3479	1707	1698	85.37	259.04	Kadua, Dhanua, Bhadua, Ratnachira, Malaguni, Devi, Daya, Kusabhadra, Bhargavi, Prachi, Luna	1408.8
27	Rayagada	7073	2665	962	50.88	234.77	Bansadhara, Nagabali	1285.9
28	Sambalpur	6657	1313	1044	76.91	249.11	Mahanadi	1495.7
29	Subarnapur	2337	962	652	74.42	217.75	Mahanadi, Tel	1418.5
30	Sundargarh	9712	1762	2081	74.13	349.86	Brahmani, Ib	1422.4
Total (State)		155707	51313	41947	73.45	8167.60		1451.2

CHAPTER- 2 Rainfall

Normal rainfall (Long Term Average):

The long term average rainfall in respect of different Blocks, Districts and the State for different months of year is fixed by IMD, Pune taking into account the rainfall data for preceding 30 years. Such long term average rainfall popularly called 'Normal Rainfall' has been last fixed during 2006 for different districts and the State as follows:

Sl. No.	District	Annual Normal Rainfall (in mm)	Sl. No.	District	Annual Normal Rainfall (in mm)
1	Angul	1401.9	17	Kendrapada	1556.0
2	Balasore	1592.0	18	Keonjhar	1487.7
3	Bargarh	1367.3	19	Khordha	1408.4
4	Bhadrak	1427.9	20	Koraput	1567.2
5	Balangir	1289.8	21	Malkanagiri	1667.6
6	Boudh	1623.0	22	Mayurbhanj	1600.2
7	Cuttack	1424.3	23	Nawarangpur	1569.5
8	Deogarh	1582.5	24	Nayagarh	1354.3
9	Dhenkanal	1428.8	25	Nuapada	1286.4
10	Gajapati	1403.3	26	Puri	1408.8
11	Ganjam	1276.2	27	Rayagada	1285.9
12	Jagatsinghpur	1514.6	28	Sambalpur	1495.7
13	Jajpur	1559.9	29	Subarnapur	1418.5
14	Jharsuguda	1362.8	30	Sundargarh	1422.4
15	Kalahandi	1330.5	State Average		1451.2
16	Kandhamal	1427.9			

District-wise rainfall for the year 2021

The district-wise monthly rainfall statistics from January to December, 2021 including percentage of deviation is indicated in the table below.

Sl. No.	DISTRICT	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY		
		Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.
1	Angul	0.0	12.6	-100.0	0.6	27.1	-97.7	4.4	24.3	-81.9	5.6	27.2	-79.4	160.4	52.9	203.2	145.7	225.1	-35.3	252.4	347.7	-27.4
2	Balasore	0.0	14.7	-100.0	0.0	31.8	-100.0	0.0	34.4	-100.0	34.8	62.2	-44.1	342.2	108.5	215.4	175.2	221.5	-20.9	216.2	308.6	-29.9
3	Bargarh	1.8	12.5	-86.0	2.8	19.1	-85.2	4.6	22.0	-79.2	2.5	20.0	-87.6	70.7	25.6	176.2	209.1	205.6	1.7	323.1	397.2	-18.7
4	Bhadrak	0.0	11.8	-100.0	0.0	29.6	-100.0	0.0	36.1	-100.0	23.5	51.2	-54.1	477.3	91.4	422.3	103.0	198.2	-48.0	167.5	293.6	-42.9
5	Balangir	0.0	8.6	-100.0	2.3	13.2	-82.9	0.3	14.6	-97.8	1.4	13.4	-89.9	57.2	27.8	105.6	143.8	202.8	-29.1	280.3	360.5	-22.3
6	Boudh	0.0	17.0	-100.0	0.0	26.8	-100.0	0.0	22.4	-100.0	20.5	16.5	24.4	94.0	38.4	144.7	124.7	233.8	-46.7	362.7	418.5	-13.3
7	Cuttack	0.0	9.9	-100.0	0.0	28.6	-100.0	15.6	24.7	-37.0	22.3	28.3	-21.1	202.1	71.5	182.7	270.5	210.0	28.8	271.2	308.3	-12.0
8	Deogarh	4.9	14.1	-65.5	6.2	27.0	-77.0	20.6	20.6	0.0	53.7	21.3	152.3	264.2	41.9	530.5	195.3	242.4	-19.4	324.0	447.7	-27.6
9	Dhenkanal	0.0	10.5	-100.0	0.0	21.9	-100.0	5.4	33.7	-84.0	31.4	41.3	-23.9	167.4	69.6	140.5	184.8	225.7	-18.1	275.3	317.9	-13.4
10	Gajapati	31.6	8.1	289.8	0.0	23.0	-100.0	0.3	41.3	-99.3	75.1	65.2	15.2	93.7	107.8	-13.0	97.7	199.7	-51.1	224.3	230.6	-2.7
11	Ganjam	2.2	9.4	-76.5	0.2	24.1	-99.2	0.5	32.6	-98.6	11.4	36.6	-69.0	78.5	65.4	20.0	102.8	168.3	-38.9	236.0	220.8	6.9
12	Jagatsinghpur	0.0	14.5	-100.0	0.0	21.7	-100.0	1.8	35.5	-95.1	14.5	25.4	-42.9	348.9	78.0	347.3	210.8	202.3	4.2	254.6	277.3	-8.2
13	Jajpur	0.1	12.9	-99.2	0.0	25.1	-100.0	1.6	28.4	-94.5	24.7	46.1	-46.3	413.4	93.7	341.2	197.6	238.5	-17.1	139.6	350.9	-60.2
14	Jharsuguda	11.1	14.1	-21.0	10.0	22.9	-56.3	6.8	17.6	-61.6	9.9	15.1	-34.4	154.6	27.9	454.0	215.8	218.8	-1.4	227.6	385.8	-41.0
15	Kalahandi	0.0	10.3	-100.0	4.2	14.4	-70.6	0.0	23.7	-100.0	9.1	25.7	-64.6	59.0	41.8	41.2	159.0	240.4	-33.9	296.3	327.7	-9.6
16	Kandhamal	0.0	10.6	-100.0	1.3	29.7	-95.6	0.0	28.0	-100.0	27.8	35.7	-22.2	91.9	67.8	35.6	125.8	207.9	-39.5	299.2	325.1	-8.0
17	Kendrapada	0.0	10.6	-100.0	1.0	30.2	-96.7	0.0	35.0	-100.0	22.5	33.9	-33.7	436.2	94.2	363.1	249.1	208.3	19.6	184.3	317.1	-41.9
18	Keonjhar	0.6	14.6	-95.9	3.7	33.8	-89.1	6.2	33.1	-81.3	37.3	42.1	-11.4	342.7	94.8	261.5	154.2	241.4	-36.1	232.8	318.0	-26.8
19	Khordha	0.0	12.4	-100.0	0.0	24.3	-100.0	0.0	22.1	-100.0	10.6	28.0	-62.1	143.2	60.7	136.0	174.1	196.2	-11.3	265.4	304.9	-13.0
20	Koraput	1.0	5.7	-83.2	8.5	8.6	-1.2	5.0	18.3	-72.8	55.3	55.2	0.2	90.3	81.9	10.2	263.9	206.8	27.6	238.4	375.6	-36.5
21	Malkanagiri	0.0	2.7	-100.0	2.7	4.1	-33.8	0.0	8.9	-100.0	97.3	34.8	179.5	51.6	49.1	5.1	216.3	212.2	1.9	374.1	465.7	-19.7
22	Mayurbhanj	0.0	10.3	-100.0	1.4	28.0	-95.1	3.6	40.2	-91.2	31.0	52.5	-40.9	295.6	101.2	192.1	177.3	265.8	-33.3	315.6	337.3	-6.4
23	Nawarangpur	1.7	6.7	-74.6	2.4	14.1	-83.0	3.5	15.1	-76.7	54.0	34.1	58.4	67.2	66.1	1.6	210.0	251.8	-16.6	270.1	356.6	-24.3
24	Nayagarh	2.6	11.7	-77.6	0.0	28.6	-100.0	10.2	30.0	-66.0	14.3	39.9	-64.2	90.1	58.8	53.1	143.4	203.5	-29.5	310.2	288.5	7.5
25	Nuapada	0.0	12.0	-100.0	3.3	14.6	-77.5	0.0	19.7	-100.0	11.6	21.8	-46.8	65.4	31.2	109.5	181.3	210.3	-13.8	331.6	347.1	-4.5
26	Puri	0.0	10.9	-100.0	0.0	25.4	-100.0	0.1	15.5	-99.4	7.4	18.5	-60.1	166.0	62.1	167.2	205.8	188.0	9.5	232.7	292.0	-20.3
27	Rayagada	0.0	9.6	-100.0	1.1	22.9	-95.4	0.0	38.0	-100.0	14.9	52.7	-71.6	50.8	87.8	-42.1	127.8	195.3	-34.5	188.4	259.5	-27.4
28	Sambalpur	6.4	14.8	-56.5	6.0	24.5	-75.4	10.3	18.2	-43.5	5.0	16.5	-69.7	135.1	32.3	318.2	198.8	221.0	-10.0	310.1	429.5	-27.8
29	Subarnapur	0.0	12.5	-100.0	4.1	17.2	-76.5	4.3	15.7	-72.9	4.1	15.4	-73.7	56.7	29.3	93.4	209.9	217.4	-3.5	359.0	399.6	-10.2
30	Sundargarh	2.0	15.1	-86.7	10.0	24.9	-59.7	20.1	16.0	25.8	6.2	16.0	-61.1	218.7	40.6	438.8	241.4	237.4	1.7	261.1	386.4	-32.4
State Average		2.2	11.4	-80.7	2.4	22.9	-89.6	4.2	25.5	-83.7	24.7	33.1	-25.5	176.2	63.3	178.3	180.5	216.5	-16.6	267.5	339.9	-21.3

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Sl. No.	DISTRICT	AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			Annual		
		Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.
1	Angul	121.4	357.5	-66.1	409.2	217.5	88.1	46.6	86.3	-46.0	35.8	20.4	75.3	39.8	3.3	1105.3	1221.8	1401.9	-12.8
2	Balasore	220.6	332.1	-33.6	456.1	267.6	70.4	177.9	170.5	4.4	0.9	34.6	-97.4	58.5	5.5	963.0	1682.3	1592.0	5.7
3	Bargarh	144.6	374.4	-61.4	332.2	222.6	49.2	44.5	52.8	-15.7	12.7	10.4	21.6	77.8	5.1	1424.8	1226.3	1367.3	-10.3
4	Bhadrak	148.5	311.7	-52.3	429.8	216.8	98.3	112.5	145.3	-22.6	16.9	37.3	-54.8	53.3	4.9	986.9	1532.3	1427.9	7.3
5	Balangir	135.1	333.6	-59.5	339.1	237.4	42.8	31.2	68.4	-54.4	14.9	7.2	107.4	16.7	2.3	627.6	1022.2	1289.8	-20.8
6	Boudh	97.4	488.8	-80.1	500.8	244.8	104.6	34.2	90.5	-62.2	25.6	21.1	21.3	56.5	4.4	1184.8	1316.4	1623.0	-18.9
7	Cuttack	264.9	339.1	-21.9	581.3	229.2	153.6	93.3	125.6	-25.7	56.2	45.0	25.0	71.8	4.1	1651.8	1849.3	1424.3	29.8
8	Deogarh	186.4	443.4	-58.0	348.6	228.2	52.7	81.1	84.4	-3.9	38.1	8.0	375.8	75.1	3.5	2044.8	1598.2	1582.5	1.0
9	Dhenkanal	167.8	344.8	-51.3	494.7	220.6	124.3	59.9	104.4	-42.6	41.1	36.2	13.6	49.6	2.2	2154.0	1477.4	1428.8	3.4
10	Gajapati	211.1	253.6	-16.7	389.4	237.9	63.7	174.3	168.6	3.4	122.0	61.8	97.3	48.1	5.7	743.2	1467.6	1403.3	4.6
11	Ganjam	252.6	246.8	2.4	340.8	216.3	57.5	102.5	177.7	-42.3	245.1	71.1	244.8	84.5	7.1	1090.8	1457.1	1276.2	14.2
12	Jagatsinghpur	253.6	379.1	-33.1	721.9	241.4	199.0	111.9	151.1	-26.0	120.5	80.4	49.9	196.1	7.9	2382.6	2234.5	1514.6	47.5
13	Jajpur	164.1	341.2	-51.9	551.1	238.0	131.5	126.7	140.2	-9.7	34.9	41.0	-15.0	55.2	3.9	1315.6	1708.9	1559.9	9.6
14	Jharsuguda	145.5	382.9	-62.0	203.9	210.7	-3.2	28.0	54.9	-49.1	21.9	7.7	184.9	64.3	4.4	1361.4	1099.4	1362.8	-19.3
15	Kalahandi	201.3	355.4	-43.4	262.4	204.6	28.2	21.9	74.0	-70.5	32.9	10.9	201.8	6.8	1.6	322.6	1052.8	1330.5	-20.9
16	Kandhamal	132.0	330.8	-60.1	385.4	239.1	61.2	53.3	117.7	-54.7	79.3	31.0	155.9	33.1	4.5	636.3	1229.1	1427.9	-13.9
17	Kendrapada	191.4	333.3	-42.6	450.1	237.3	89.7	116.1	183.7	-36.8	103.1	67.2	53.4	136.3	5.2	2521.8	1890.2	1556.0	21.5
18	Keonjhar	178.7	343.6	-48.0	361.2	241.1	49.8	88.2	101.3	-13.0	27.8	20.5	35.6	60.2	3.4	1670.8	1493.6	1487.7	0.4
19	Khordha	281.7	320.6	-12.1	478.7	234.5	104.1	82.4	149.3	-44.8	98.0	50.4	94.4	78.0	5.0	1460.4	1612.1	1408.4	14.5
20	Koraput	318.0	393.6	-19.2	352.6	256.3	37.6	70.9	126.1	-43.8	68.1	32.6	108.8	6.8	6.5	5.2	1478.8	1567.2	-5.6
21	Malkanagiri	392.0	472.8	-17.1	371.3	281.2	32.0	112.6	109.5	2.9	58.8	23.6	149.2	0.0	3.0	-100.0	1676.6	1667.6	0.5
22	Mayurbhanj	178.9	359.9	-50.3	415.3	262.0	58.5	121.5	114.1	6.5	11.3	21.6	-47.7	49.6	7.3	579.9	1601.1	1600.2	0.1
23	Nawarangpur	315.9	407.5	-22.5	225.1	225.6	-0.2	43.0	168.6	-74.5	39.1	18.7	109.0	0.7	4.6	-84.8	1232.7	1569.5	-21.5
24	Nayagarh	237.0	288.2	-17.8	518.8	226.8	128.7	59.9	134.5	-55.4	127.3	39.0	226.3	68.9	4.8	1335.2	1582.6	1354.3	16.9
25	Nuapada	157.9	327.8	-51.8	326.7	214.5	52.3	13.1	68.9	-81.0	12.6	15.3	-17.4	11.4	3.2	255.0	1114.8	1286.4	-13.3
26	Puri	168.1	297.9	-43.6	556.3	243.2	128.8	56.6	181.6	-68.8	69.4	67.3	3.1	114.0	6.4	1681.8	1576.4	1408.8	11.9
27	Rayagada	217.8	273.7	-20.4	255.9	199.1	28.5	71.0	109.7	-35.3	48.6	32.9	47.6	14.9	4.7	218.0	991.2	1285.9	-22.9
28	Sambalpur	132.9	442.4	-70.0	261.6	224.7	16.4	41.3	54.7	-24.4	28.7	12.7	125.9	72.4	4.4	1544.7	1208.6	1495.7	-19.2
29	Subarnapur	149.9	408.9	-63.4	444.1	228.0	94.8	38.5	59.8	-35.7	15.4	11.4	34.9	40.3	3.3	1119.7	1325.9	1418.5	-6.5
30	Sundargarh	138.1	393.9	-64.9	284.6	211.5	34.6	101.1	67.7	49.4	37.2	8.7	328.1	47.4	4.2	1028.2	1368.1	1422.4	-3.8
	State Average	196.8	356.0	-44.7	401.6	231.9	73.2	77.2	114.7	-32.7	54.8	31.5	74.0	56.3	4.5	1150.5	1444.3	1451.2	-0.5

Rainfall during Monsoon 2021 (1st June to 30th September)

The State experienced average deficit rainfall of 16.6 percent in June, deficit rainfall of 21.3 percent in July, deficit rainfall of 44.7 percent in August and surplus rainfall of 73.2 percent in September, 2021 compared to the long term average rainfall. The cumulative average rainfall of the State from June to September, 2021 remained 1046.4 mm against the Long Term Average (LTA) of 1144.3 mm registering a deficit of 8.6 percent.

Month	Normal	Rainfall in MM	
		Actual	Deviation in %
June	216.5	180.5	-16.6
July	339.9	267.5	-21.3
August	356.0	196.8	-44.7
September	231.9	401.6	73.2
Total:	1144.3	1046.4	-8.6

Block-wise analysis of the cumulative rainfall from 1st June, 2021 to 30th September, 2021 indicates that out of 314 Blocks in the State, 45 Blocks received surplus rainfall (above 19%), 161 Blocks received normal rainfall (+19% to -19%), 88 Blocks received deficit rainfall (shortfall of >19% to 39%), 20 Blocks received severe deficit rainfall (shortfall of >39% to 59%) and no Block recorded scanty rainfall (shortfall of >59%). Table below indicates district-wise position.

STATUS OF RAINFALL (1st June, 2021 to 30th September, 2021)							
Sl. No.	District	No. of Blocks having Surplus Rainfall (above 19%)	No. of Blocks having Normal Rainfall (+19% to -19%)	No. of Blocks having Deficit Rainfall (shortfall of >19% up to 39%)	No. of Blocks having Severe Deficit Rainfall (shortfall of >39% up to 59%)	No. of Blocks having Scanty Rainfall (shortfall of >59%)	Not Reported
1	2	3	4	5	6	7	8
1	Angul	1	3	3	1		
2	Balasore	1	8	3			
3	Bargarh		6	6			
4	Bhadrak		2	5			
5	Balangir		6	7	1		
6	Boudh		2		1		
7	Cuttack	7	5	1			
8	Deogarh		1	2			
9	Dhenkanal	2	5	1			
10	Gajapati	1	5	1	1		
11	Ganjam	9	10	3			
12	Jagatsinghpur	5	3				

13	Jajpur		6	4		
14	Jharsuguda		1	1	3	
15	Kalahandi		5	6	2	
16	Kandhamal		7	5		
17	Kendrapara	2	4	2	1	
18	Keonjhar		8	4	1	
19	Khordha	2	8			
20	Koraput	3	7	4		
21	Malkanagiri	1	5	1		
22	Mayurbhanj	2	15	6	3	
23	Nawarangpur		7	2	1	
24	Nayagarh	3	5			
25	Nuapada		5			
26	Puri	5	4	2		
27	Rayagada		7	4		
28	Sambalpur		2	4	3	
29	Subarnapur	1	4		1	
30	Sundargarh		5	11	1	
No. of Blocks		45	161	88	20	0
No. of Districts		15	30	24	13	0

Fig.1.1. District-wise Rainfall for the year 2021

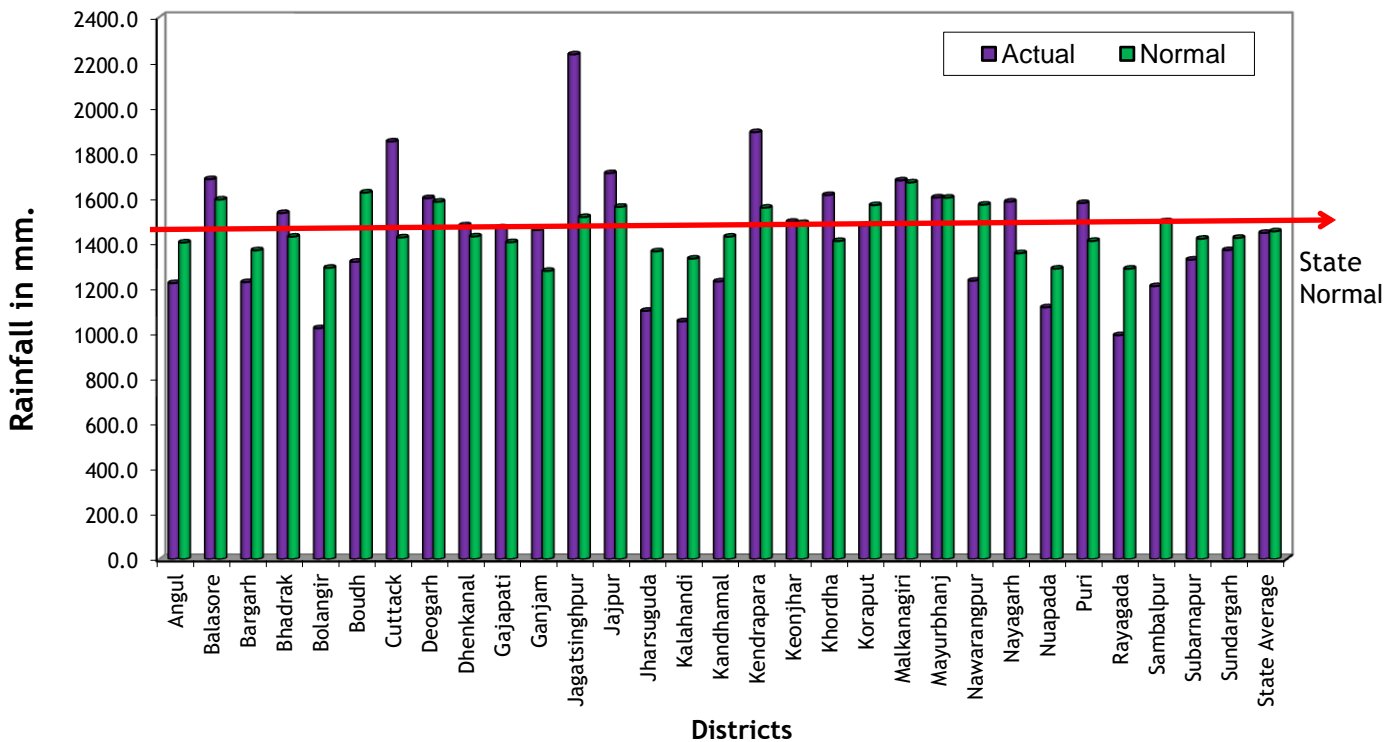


Fig. 1.2. Month-wise Rainfall for the year 2021

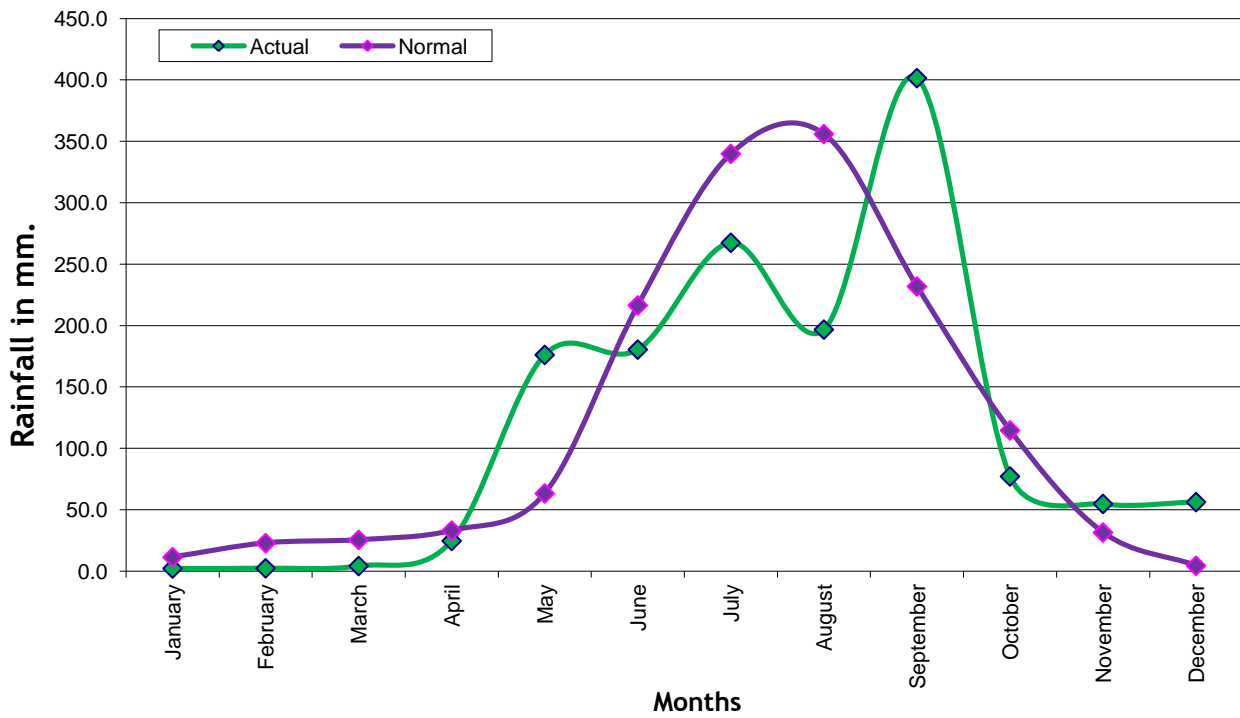
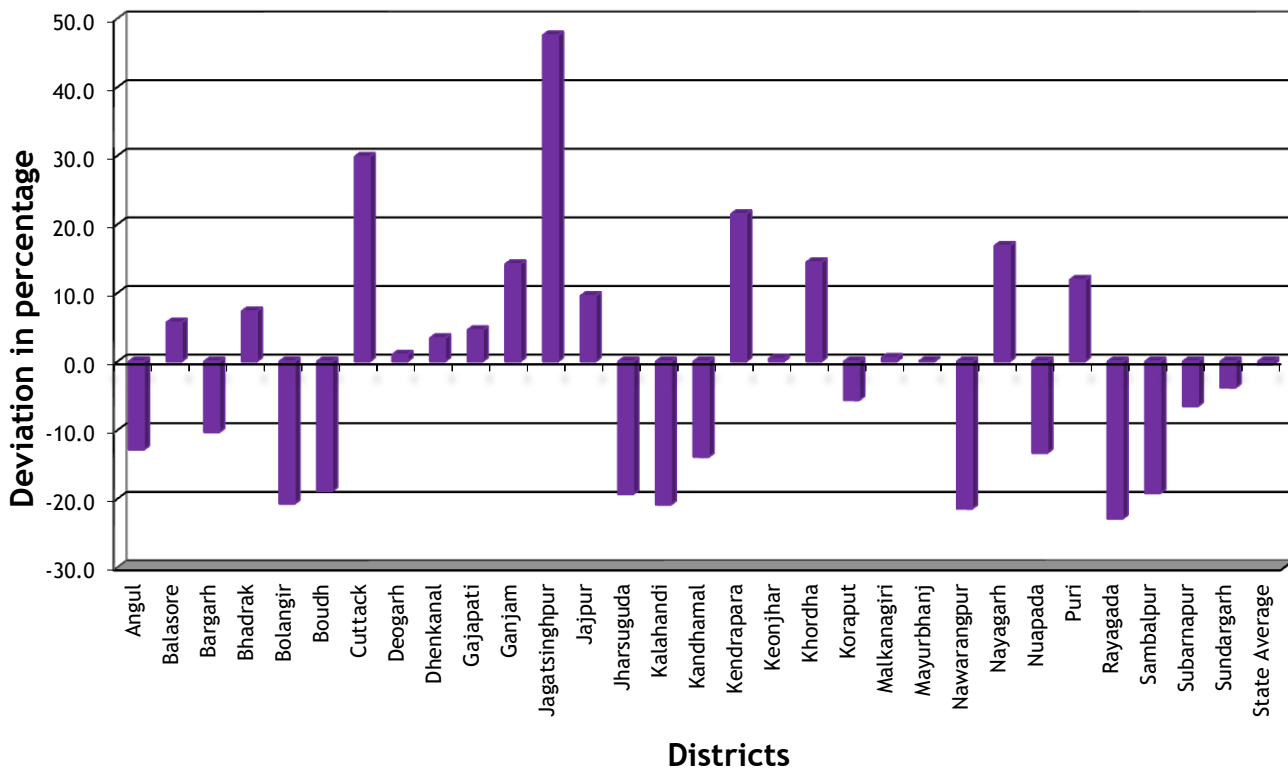


Fig. 1.3. Rainfall Deviation of the Districts for the year 2021



CHAPTER – 3

Disasters during the year

3.1. Flood & Heavy Rain 2021

During 13th& 14th September, 2021 many parts of the State experienced heavy rain due to depression over Bay of Bengal. On 13.09.2021, the highest rainfall of 530 mm received in Astarang Block of Puri district followed by 525 mm in Kakatpur of Puri district, 440 mm in Balikuda Block of Jagatsinghpur district. On the same day, 8 Blocks of the State received rainfall of more than 300mm, 17 Blocks received more than 200 to 300 mm, 33 Blocks received more than 100 to 200 mm.

On 14.09.2021, the highest rainfall of 394 mm received in Talcher Block of Angul district followed by 372 mm in Biramaharajpur of Subarnapuri district. On the same day, 88 Blocks of 9 districts of the State have received rainfall more than 200 to 300 mm, 47 Blocks received more than 100 to 200 mm. Due to heavy rain on 13th& 14th September, 2021, flood like situation occurred in low lying areas and the water level of rivers, canals & reservoirs have risen.

Rainfall from 13.09.2021 to 15.09.2021

DISTRICT AVERAGE RAINFALL					
(Rainfall in mm.)					
Sl. No.	District	13	14	15	Total
1	Jagatsinghpur	306.0	49.0	40.9	395.9
2	Puri	317.3	42.5	14.9	374.7
3	Boudh	132.0	229.3	6.3	367.6
4	Subarnapur	104.3	190.9	16.6	311.8
5	Cuttack	143.9	131.1	14.6	289.6
6	Jajpur	128.8	141.9	5.8	276.5
7	Dhenkanal	44.0	194.5	0.1	238.6
8	Khordha	163.2	58.2	9.9	231.3
9	Angul	39.9	184.2	4.0	228.1
10	Nayagarh	115.1	103.6	0.5	219.2
11	Kendrapara	141.1	45.8	17.4	204.3
12	Kandhamal	69.3	119.2	8.0	196.5
13	Balangir	25.7	143.3	17.9	186.9

14	Bargarh	34.1	111.7	32.3	178.1
15	Balasore	32.4	74.1	30.1	136.6
16	Sambalpur	56.2	55.6	22.5	134.3
17	Nuapada	10.8	98.2	23.4	132.4
18	Bhadrak	53.9	65.2	6.3	125.4
19	Keonjhar	44.4	59.7	16.3	120.4
20	Sundargarh	32.4	24.6	62.6	119.6
21	Jharsuguda	48.9	18.5	48.9	116.3
22	Mayurbhanj	35.9	45.7	27.5	109.1
23	Deogarh	48.3	24.3	33.7	106.3
24	Ganjam	47.5	27.1	3.0	77.6
25	Malkanagiri	27.6	33.8	10.1	71.5
26	Kalahandi	15.7	46.3	7.5	69.5
27	Rayagada	27.5	21.4	9.5	58.4
28	Koraput	13.3	26.0	4.9	44.2
29	Gajapati	25.4	10.9	3.6	39.9
30	Nawarangpur	6.0	8.1	14.6	28.7
State Average		76.4	79.5	17.1	173.0

The analysis of block wise rainfall reveals that Kakatpur & Astarang Block of Puri district recorded more than 500 mm of rainfall in a single day. The block wise details of rainfall recorded from 13th September to 15th September is given below.

RAINFALL REPORTS OF DIFFERENT BLOCKS FROM 13.09.2021 TO 15.09.2021						
(Rainfall in mm.)						
Sl. No.	District	Block	13.09.2021	14.09.2021	15.09.2021	Total
Rainfall above 600 mm						
1	Puri	Kakatpur	525.0	13.5	107.4	645.9
2		Astarang	530.0	63.0	35.0	628.0
Rainfall from 500 mm to 600 mm						
1	Jagatsinghpur	Balikuda	440.0	49.0	62.0	551.0
2	Subarnapur	Birmaharajpur	200.0	372.0	6.0	578.0
Rainfall from 400 mm to 500 mm						
1	Angul	Talcher	20.0	394.0	2.0	416.0
2	Boudh	Boudh	184.0	262.0	2.0	448.0
3	Cuttack	Kantapada	381.0	63.0	51.0	495.0
4		Niali	370.0	70.0	9.0	449.0
5	Jagatsinghpur	Erasama	273.0	76.0	89.0	438.0
6		Naugaon	380.0	25.0	20.0	425.0
Rainfall from 300 mm to 400 mm						
1	Balangir	Patnagarh	12.0	251.0	43.6	306.6

2		Belpada	72.0	217.0	16.0	305.0
3	Boudh	Harabhanga	152.0	194.0	9.0	355.0
4		Kantamal	60.0	232.0	8.0	300.0
5	Cuttack	Mahanga	147.0	205.0	20.0	372.0
6		Tangi-Choudwar	180.0	131.0	7.0	318.0
7		Banki-Dampada	120.0	190.0	0.0	310.0
8		Salepur	140.0	130.0	30.0	300.0
9	Jagatsinghpur	Raghunathpur	323.0	35.0	38.0	396.0
10		Biridi	258.0	78.0	50.0	386.0
11		Kujanga	265.0	80.0	35.0	380.0
12		Jagatsinghpur	264.0	26.0	18.0	308.0
13	Jajpur	Dharmasala	220.0	160.0	3.0	383.0
14		Bari	128.0	211.0	3.5	342.5
15		Badachana	180.0	150.0	9.0	339.0
16		Binjharpur	149.4	165.8	12.6	327.8
17	Kandhamal	Khajuripada	172.0	211.2	2.0	385.2
18		Phulbani	151.2	181.6	3.6	336.4
19		Phiringia	91.2	209.8	10.4	311.4
20	Kendrapara	Kendrapara	276.0	28.0	20.0	324.0
21		Marshaghai	270.0	27.0	12.0	309.0
22	Khordha	Balipatna	280.5	50.5	19.6	350.6
23	Puri	Puri	352.0	30.0	10.0	392.0
24		Gop	331.0	30.3	8.2	369.5
25		Satyabadi	328.0	40.0	1.0	369.0
26		Nimapara	302.0	20.0	1.0	323.0
27		Pipili	263.0	55.0	1.0	319.0
28	Subarnapur	Sonepur	130.0	250.0	16.0	396.0
29		Ullunda	153.4	151.0	14.8	319.2
Rainfall from 200 mm to 300 mm						
1	Angul	Banarpal	15.8	245.6	1.4	262.8
2		Kishorenagar	61.8	182.4	9.6	253.8
3		Angul	48.6	201.6	1.0	251.2
4		Athamalik	42.0	197.0	4.0	243.0
5	Balangir	Balangir	44.0	240.0	11.2	295.2
6		Puintala	44.0	204.0	11.0	259.0
7		Duduka	39.0	179.0	26.0	244.0
8		Khaprakhol	4.0	160.0	42.0	206.0
9	Balasore	Bhograi	25.2	74.3	122.2	221.7
10		Baliapal	37.0	131.0	43.0	211.0
11	Bargarh	Paikmal	8.3	237.0	29.3	274.6
12		Gaisilet	15.2	206.2	22.0	243.4
13		Jharbandh	7.0	175.0	40.0	222.0
14		Padampur	20.2	159.4	25.0	204.6

15	Cuttack	Narasinghpur	65.0	187.0	0.0	252.0
16		Cuttack Sadar	85.0	126.0	37.0	248.0
17		Athagarh	80.0	161.0	0.0	241.0
18		Badamba	85.0	151.0	0.0	236.0
19		Barang	125.0	90.0	10.0	225.0
20	Dhenkanal	Hindol	42.2	239.0	0.0	281.2
21		Parjang	23.0	226.0	1.0	250.0
22		Gondia	80.0	163.0	0.0	243.0
23		Bhuban	78.0	165.0	0.0	243.0
24		Odapada	14.0	220.0	0.0	234.0
25		Dhenkanal	64.6	164.5	0.0	229.1
26		Kamakhyanagar	28.1	198.1	0.0	226.2
27		Kankadahad	22.2	180.0	0.0	202.2
28	Jagatsinghpur	Tirtol	245.0	23.0	15.0	283.0
29	Jajpur	Rasulpur	147.8	145.6	5.8	299.2
30		Jajpur	120.0	107.0	15.0	242.0
31		Danagadi	84.4	138.6	1.0	224.0
32		Sukinda	81.3	141.4	0.0	222.7
33		Korei	93.4	112.0	0.0	205.4
34	Kandhamal	Tikabali	74.0	137.0	9.0	220.0
35	Kendrapara	Derabis	206.0	57.0	8.0	271.0
36		Mohakalpara	158.0	70.0	22.0	250.0
37		Garadapur	169.0	36.0	18.0	223.0
38	Keonjhar	Ghatgaon	20.6	60.2	124.7	205.5
39	Khordha	Bhubaneswar	209.1	54.2	17.2	280.5
40		Tangi	202.4	62.2	0.0	264.6
41		Balianta	82.0	94.0	62.0	238.0
42		Khordha	164.0	58.0	0.0	222.0
43		Chilika	160.0	58.1	0.0	218.1
44		Jatani	152.0	50.0	0.0	202.0
45		Bolagarh	148.0	52.0	0.0	200.0
46	Nayagarh	Khandapara	163.2	120.3	0.0	283.5
47		Daspalla	112.2	120.8	1.0	234.0
48		Gania	45.0	189.0	0.0	234.0
49		Bhapur	125.4	95.4	0.0	220.8
50		Nuagaon	115.0	96.0	0.0	211.0
51		Nayagarh	103.0	95.0	3.0	201.0
52	Nuapada	Nuapada	5.6	199.4	17.2	222.2
53	Puri	Delang	228.0	62.0	0.0	290.0
54		Brahmagiri	240.0	40.0	0.0	280.0
55		Kanas	212.0	61.0	0.0	273.0
56		Krushnaprasad	179.4	52.3	0.0	231.7
57	Sambalpur	Rairakhol	109.0	105.0	19.0	233.0

58		Maneswar	94.6	98.4	23.6	216.6
59	Subarnapur	Tarbha	61.0	198.0	8.6	267.6
Rainfall from 100 mm to 200 mm						
1	Angul	Chhendipada	52.6	86.8	6.0	145.4
2		Pallahara	50.0	80.4	6.0	136.4
3		Kaniha	28.0	86.0	2.0	116.0
4	Balangir	Deogaon	23.0	146.0	20.0	189.0
5		Gudvella	18.0	126.0	5.0	149.0
6		Loisingha	17.0	110.0	8.0	135.0
7		Tureikela	9.4	98.5	13.0	120.9
8		Saintala	9.0	97.0	14.0	120.0
9		Titilagarh	52.8	52.8	4.0	109.6
10		Bangomunda	6.0	72.0	24.0	102.0
11	Balasore	Jaleswar	8.0	113.0	68.0	189.0
12		Basta	39.0	97.0	22.0	158.0
13		Khaira	28.0	105.0	5.0	138.0
14		Simulia	58.0	66.0	13.0	137.0
15		Remuna	33.0	63.0	18.0	114.0
16		Balasore	25.0	70.0	18.0	113.0
17	Bargarh	Attapura	64.4	85.2	37.4	187.0
18		Ambabhona	55.0	59.0	58.0	172.0
19		Barpali	41.0	93.0	30.0	164.0
20		Bhatli	41.0	78.0	35.0	154.0
21		Bargarh	35.4	78.2	26.6	140.2
22		Bijepur	34.0	71.0	35.0	140.0
23		Bheden	59.2	46.5	26.2	131.9
24		Sohela	29.0	52.0	23.0	104.0
25	Bhadrak	Bhadrak	59.0	84.0	1.5	144.5
26		Dhamnagar	65.0	76.0	3.0	144.0
27		Chandbali	51.0	71.2	15.4	137.6
28		Bonth	45.0	78.0	7.0	130.0
29		Bhandaripokhari	57.0	58.0	6.0	121.0
30		Basudevapur	59.0	55.0	3.0	117.0
31	Cuttack	Tigiria	53.0	132.0	0.0	185.0
32		Nischintakoili	39.2	68.5	25.4	133.1
33	Deogarh	Deogarh	57.8	18.4	42.0	118.2
34		Reamal	58.2	27.4	31.2	116.8
35	Ganjam	Jagannathprasad	76.0	92.0	3.2	171.2
36		Bhanjanagar	64.0	69.0	5.0	138.0
37		Buguda	57.0	62.0	5.0	124.0
38		Belaguntha	47.0	71.4	4.8	123.2
39		Dharakote	45.0	32.0	28.0	105.0
40	Jajpur	Dasarathpur	84.0	88.0	7.8	179.8

41	Jharsuguda	Lakhanpur	96.2	29.0	57.2	182.4
42		Jharsuguda	39.0	17.0	76.0	132.0
43		Laikera	44.1	17.2	54.0	115.3
44	Kalahandi	Madanpur Rampur	20.0	92.0	6.0	118.0
45		Karlamunda	16.2	90.0	5.0	111.2
46	Kandhamal	Chakapad	61.0	128.2	0.0	189.2
47		Daringibadi	48.0	78.2	20.0	146.2
48		G.Udayagiri	54.8	78.2	10.8	143.8
49		Baliguda	38.0	88.0	8.0	134.0
50		Nuagaon	43.4	84.8	4.2	132.4
51		Kotagarh	37.0	84.6	10.0	131.6
52		Raikia	41.6	78.8	5.6	126.0
53		Tumudibandh	18.8	69.6	12.4	100.8
54	Kendrapara	Rajkanika	52.0	79.0	20.0	151.0
55		Rajnagar	54.0	60.0	30.0	144.0
56		Pattamundai	55.0	37.0	20.0	112.0
57	Keonjhar	Telkoi	40.0	134.3	1.6	175.9
58		Banspal	69.2	84.1	19.2	172.5
59		Joda	64.4	47.4	30.2	142.0
60		Keonjhar	60.2	63.6	2.1	125.9
61		Champua	75.0	34.0	15.3	124.3
62		Hatadihi	57.7	50.5	2.0	110.2
63		Harichandanpur	18.6	88.2	1.6	108.4
64		Jhumpura	53.2	41.8	12.4	107.4
65		Ghasipura	43.3	60.4	1.1	104.8
66	Khordha	Banapur	139.0	51.0	0.0	190.0
67		Begunia	95.0	52.0	0.0	147.0
68	Malkangiri	Korukonda	69.0	68.0	48.0	185.0
69	Mayurbhanj	Jamda	146.0	26.0	5.0	177.0
70		Bangriposi	28.2	61.2	85.6	175.0
71		Sarasakana	56.0	39.0	72.0	167.0
72		Morda	13.0	74.0	56.0	143.0
73		Kaptipada	32.0	69.0	42.0	143.0
74		Suliapada	19.0	59.2	62.2	140.4
75		Rairangapur	93.0	42.0	1.0	136.0
76		Besoi	48.0	63.0	16.0	127.0
77		Samakhunta	20.0	40.0	64.0	124.0
78		Betanati	14.0	66.0	31.0	111.0
79		Raruana	53.0	39.0	13.0	105.0
80		Kusumi	55.0	37.0	12.0	104.0
81		Kuliana	9.0	39.0	54.0	102.0
82		Udala	35.2	58.6	6.6	100.4
83	Nayagarh	Ranpur	125.4	60.4	0.0	185.8

84		Odagaon	131.8	52.1	0.0	183.9
85	Nuapada	Komna	9.0	134.2	34.0	177.2
86		Boden	20.0	58.0	27.0	105.0
87	Rayagada	Muniguda	42.3	53.5	7.0	102.8
88	Sambalpur	Jujumura	78.4	75.6	17.0	171.0
89		Dhankauda	44.4	61.1	22.2	127.7
90		Naktideul	42.0	52.0	31.0	125.0
91	Subarnapur	Dunguripali	36.0	122.0	36.0	194.0
92		Binika	45.2	52.2	18.2	115.6
93	Sundargarh	Lahunipara	65.0	20.0	77.0	162.0
94		Gurundia	34.8	48.0	79.0	161.8
95		Bonai	33.0	28.0	98.0	159.0
96		Sundargarh	22.4	15.4	116.1	153.9
97		Lathikata	34.0	22.0	94.0	150.0
98		Nuagaon	46.0	27.3	71.3	144.6
99		Bisra	34.3	24.0	86.3	144.6
100		Subdega	10.0	7.0	118.0	135.0
101		Hemgir	63.2	16.1	39.0	118.3
102		Koira	43.2	61.0	12.0	116.2
103		Lephripa	60.0	10.0	35.0	105.0

Water Level of Rivers on 18.09.2021:

River	Forecast Station	Danger Level	Warning Level	Water Level at 6 AM	Water Level at 9 AM
Mahanadi	Naraj	26.41	25.41	25.95 R	25.97 R
Devi	Alipingal	11.76	10.85	09.39 S	09.40 R
Kushabhadra	Nimapada	10.76	09.85	07.36 R	07.46 R
IB	Sundargarh	222.00	221.70	218.25 F	218.24 F
Brahmani	Panposh	178.42	174.47 F	174.40 F
	Jenapur	23.00	22.00	21.37 R	21.43 R
Baitarani	Anandpur	38.36	37.45	35.25 F	35.10 F
	Akhuapada	17.83	17.33	17.73 F	17.70 F
Burhabalanga	N.H 5	08.13	07.21	06.70 F	06.40 F
Subarnrekha	Jamsholaghat	49.15	48.32	46.90 F	46.60 F
	Rajghat	10.36	09.45	09.79 F	09.55 F
Vansadhara	Gunupur	84.00	83.00	81.20 F	81.23 R
	Kashinagar	54.60	53.60	53.24 F	53.33 R
Rushikulya	Purushotampur	16.83	15.83	13.52 F	13.52 S
Jalaka	Mathani	05.50	06.35 F	06.35 S

Discharge of flood water in Mahanadi on 18.09.2021

(flow of water in cusec)

Time	Present Reservoir Level	Inflow	Outflow	No. of gates Open	Discharge at Khairmal	Discharge at Barmul	Discharge at Munduli
6 AM	628.29	3,71,264	4,09,383	24	6,14,000	6,22,000	6,69,000
9 AM	628.21	3,56,967	4,07,791	24	6,14,000	6,13,000	6,76,000

Flood Situation in river Mahanadi:

Due to more inflow from Chhattisgarh, 28 gates of Hirakud Dam was opened on 17.09.2021 releasing about 4.87 lakh cusec of water in to Mahanadi.

- Taking into account the contribution from the tributaries downstream Hirakud, it was predicted that about 7 to 8 Lakh cusec of flood water will pass at Mundali Reservoir any time from Noon to evening on 18.09.2021 which may cause Low to Medium flood in River Mahandi and its Branches. Eleven districts such as Sambalpur, Subarnapur, Boudh, Nayagarh, Angul, Cuttack, Puri, Jagatsinghpur, Kendrapada, Khordha and Jajpur are likely to be affected by this flood.
- Collectors of these 11 districts were instructed to be in full preparedness to meet any eventuality. They had been instructed to see the following works urgently-
 - Guarding of embankments especially at weak/ vulnerable points
 - Identify habitations likely to be inundated and organise evacuation
 - Keep the shelters in readiness and in case of evacuation, organise food, safe drinking water, sanitation, light and health facility
 - Control rooms to function round the clock
 - Satellite phones to keep ready.

Deployment of Response Forces :

Sl. No	District	ODRAF (10member Teams)	NDRF (20 member Teams)	Fire Service (7 member Teams)	Total Teams
1	Balasore	12	2	5	19
2	Bhadrak	-	2		2
3	Kendrapada	6	2	10	18
4	Jajpur	6	2		8
5	Cuttack	3	2		5
6	Puri	3	2	10	15
7	Reserve	12	6		18
	Total	42	18	25	85

Relief Measures Undertaken:

- Free kitchen provided to evacuated people in 233 Free Kitchen Centres
- Dry food in shape of rice, chuda, gur, biscuit pkts provided to marooned people.
- Mobile health team and veterinary team deployed in the affected areas.
- Cattle feed dispatched to affected districts for affected cattle.
- Drinking water provided through water tankers.
- Disinfection of drinking water sources made.
- Polythene sheets provided as temporary shelter material to people whose houses have been fully/ severely damaged.

Evacuation:

Sl. No	District	People Evacuated	Sl. No	District	People Evacuated
1	Bargarh	242	9	Jharsuguda	12
2	Balangir	151	10	Kandhamal	24
3	Balasore	382	11	Kendrapara	1117
4	Bhadrak	656	12	Mayurbhanj	3195
5	Cuttack	5683	13	Nayagarh	50
6	Dhenkanal	220	14	Puri	4115
7	Jagatsinghpur	6988	15	Sambalpur	302
8	Jajpur	1690	16	Subarnapur	66
Total					24893

Impact:

154 Blocks, 34 ULBs, 6365 villages of 23 Districts were affected by heavy rain and flood. 3038 lakh people were affected. 24893 people were evacuated from low lying areas. 13 persons have lost their life due to drowning and wall collapse. 16903 private houses have been damaged. 1.46 lakh hect. of crop area have been inundated.

SI No.	Name of District	No. of Blocks Affected	No. of GPs Affected	No. of Villages Affected	No. of ULB Affected	Population Affected (Nos.)
1	Angul	8	177	430	2	6,296
2	Balasore	7	88	413	0	2,89,096
3	Balangir	9	75	352	3	2,632
4	Baragarh	5	9	11		717
5	Bhadrak	7	26	58	4	19,624
6	Boudh	3	49	488	1	1,78,490
7	Cuttack	13	138	273	4	42,823

8	Deogarh	2	5	5	1	101
9	Dhenkanal	8	141	480	3	1,00,000
10	Jagatsinghpur	8	198	1321	2	11,36,971
11	Jajpur	10	180	688	1	92,802
12	Jharsuguda	2	9	13		1,208
13	Kandhamal	9	13	30	1	10,200
14	Kendrapara	9	155	901	2	8,89,117
15	Keonjhar	4	20	63		15,002
16	Khordha	4	24	78		5,590
17	Koraput	7	27	35	1	247
18	Mayurbhanj	22	44	318	1	40,279
19	Nayagarh	5	33	165		1,77,000
20	Nuapada	3	13	65	1	985
21	Puri	6	68	113	4	28,909
22	Subarnapur	2	18	54	1	790
23	Sundargarh	1	10	11	2	65
Total		154	1520	6365	34	30,38,944

House Damage

Sl. No	Name of the district	Fully damaged house		Severely damaged house		Partially damaged house		Hut damaged	Total No. of houses damaged	Cow shed damaged
		Pucca	Kutcha	Pucca	Kutcha	Pucca	Kutcha			
		No.	No.	No.	No.	No.	No.			
1	Angul	4	13	1	23	11	1126	0	1178	6
2	Balasore	0	0	0	5	1	675	38	719	14
3	Balangir		2		64	2	1100	0	1168	6
4	Bargarh				3		133	6	142	
5	Bhadrak	0	3	0	0	0	3	0	6	1
6	Boudh						1185		1185	1
7	Cuttack				36	20	3194	4	3254	918
8	Deogarh						5		5	1
9	Dhenkanal	0	1	0	0	5	292	1	299	23

10	Jagatsinghpur	0	0	1	0	1	777	0	779	1129
11	Jajpur	0	0	0	59	2	3771	737	4569	1115
12	Kandhamal				1	4	125	2	132	2
13	Kendrapara	0	0	0	0	1	139	7	147	26
14	Keonjhar	0	1	1	0	0	102	0	104	0
15	Khordha	0	0	0	1	1	321	0	323	1
16	Koraput						47		47	
17	Mayurbhanj	0	12	0	10	1	809	65	897	105
18	Nayagarh	0	0	2	0	0	156	2	160	33
19	Nuapada		6				163		169	
20	Puri	0	0	0	6	0	881	1	888	631
21	Subarnapur	0	0	0	3	0	676	1	680	1
22	Sunadargarh	0	6	0	9	0	37	0	52	6
Total		4	44	5	220	49	15717	864	16903	4019

Crop Damage

Sl. No.	Name of the district	Total agriculture/horticulture crop area affected (in Ha.)	Total agriculture/horticulture crop area where crop loss is >33% (in Ha.)	Total area under crop loss of 33% & above (area in Ha.)			
				Rainfed	Irrigated	Perennial	Total
1	Angul	18.73	18.73	18.73	0	0	18.73
2	Balasore	10739.88	10739.88	10738.8	0	1.08	10739.88
3	Balangir	21.65	21.65	21.65	0	0	21.65
4	Bargarh	8.3	8.3	8.3	0	0	8.3
5	Bhadrak	6278	6230	6190	40	0	6230
6	Boudh	52	52	30	22	0	52
7	Cuttack	30837.2	14225.65	4040.05	10165.60	20	14225.65
8	Dhenkanal	946	906	885	21	0	906
9	Jagatsinghpur	38236	31157.46	20887.10	10260.78	9.58	31157.46
10	Jajpur	36818.5	31661.5	28824.50	2789	48	31661.5
11	Jharsuguda	76	76	45	31	0	76

12	Kendrapara	1815.66	1815.66	1815.66	0	0	1815.66
13	Khordha	2983.55	2915.55	2673.68	241.87	0	2915.55
14	Mayurbhanj	1145	1145.01	1144.92	0.08	0	1145.01
15	Puri	16428.01	8591.81	5279.61	3032.20	280	8591.81
16	Subarnapur	22	22	0	22	0	22
17	Sunadargarh	1.1	1.1	0	0	1.1	1.1
Total		1,46,419.28	109588.3	82603	26625.53	359.76	109588.3

Human Casualty

Sl. No.	Name of District	No. of Casualty
1	Balangir	1
2	Cuttack	1
3	Jajpur	3
4	Kendrapara	3
5	Keonjhar	1
6	Khordha	1
7	Mayurbhanj	2
8	Subarnapur	1
Total		13

Animal Lost

Sl. No.	Name of the district	No of Livestock / Birds lost					
		Milch Animal		Draught Animal		Total Livestock	Poultry Birds
		Buffalo/ Cow	Sheep/ Goat	Camel/ Horse/ Bullock	Calf/ Donkey/ Pony		
1	Angul	2	2	1	0	5	6000
2	Balasore	2	1	0	1	4	0
3	Balangir	0	1	0	0	1	0
4	Boudh	1	6	0	0	7	0
5	Cuttack	2	3	1	0	6	16450
6	Dhenkanal	0	11	0	0	11	0
7	Jagatsinghpur	2	7	0	0	9	4700
8	Jajpur	0	6	0	1	7	0
9	Mayurbhanj	0	7	0	0	7	0
10	Nayagarh	1	0	1	0	2	0
11	Puri	5	4	0	1	10	2920
Total		15	48	3	3	69	30070

Damage to Fishery Sector

Sl. No	Name of the district	Net & Boat damaged				Fish pond damaged		Fish Seed Farm damaged	
		No. of Boats fully damaged	No. of boats partially damaged	No. of nets fully damaged	No. of nets partially damaged	No.	Area in Ha.	No.	Area in Ha.
1	Bargarh							10	10
2	Boudh					4	2.6	0	0
3	Cuttack	1	0	1	0	34	27.91	280	122.34
4	Dhenkanal					19	13.64	20	65.64
5	Jagatsinghpur					31	10.48	648	355.82
6	Jajpur	1	0	3	0	12	4.18	66	26.11
7	Kendrapara	0	0	0	0	0	0	58	15.48
8	Khordha					1	0.8	3	2.4
9	Mayurbhanj					5	3.8	5	3.8
10	Puri	0	0	0	0	0	0.00	362	71.00
Total		2	0	4	0	106	63.41	1452	672.59

Damage to public Properties :

Major Breaches occurred in river/ canal embankment-

1. Brahmani right at Bandhadiha (10m) of Rasulpur Block
2. Brahmani Left at Matiapada(11m) of Bari Block
3. Brahmani left at Matiapada(17m) of Bari Block
4. Kusumidhar right at Jaripada(30m) of Tangi Block of Khordha Dist.
5. Jalaka Right bank near village Rekona,G.P.-Barkand, Block Morada Length-20mt,Ht-3mt.
6. Jalaka Left bank at Sansa,G.P.-Debsol Block-Rasgovindpur. Breach length-40mt,ht-3 Mt
7. Jalaka Right bank near village Debsol,G. P.-Debsol, Block-Rasgovindpur.Breach length-80mt,Ht-3mt
8. Jalaka Right bank near village Ektalli,G.P.-Raghavpur, Block-Rasgovindpur. Breach length-180mt.

Department-wise Public property Damage

Sl.	Departments/ damaged Property	Quantity
1	Water Resources Department	
	Breaches in river/ saline embankment	137 Nos./ 2.39 kms.
	Partial damage to canals	810 Nos./ 871.84 kms.
2	Works Department	
	PWD roads damaged	121 Nos./ 182.04 kms.
	Breaches in PWD roads	6 Nos./ 0.334 kms.
	CD/ Bridges damaged/ washed away in PWD roads	19 Nos.
	Drains damaged	4 Nos./ 0.16 kms.
3	Rural Development Department	
	Damage to rural roads	331 Nos./ 263.695 kms.
	Breaches in rural roads	157 Nos./ 3.006 kms.
	CD/ Bridges damaged/ washed away	138 Nos.
4	Housing & Urban Development Department	
	Road damaged	18 Nos./ 3.0 kms.
	Drain damaged	7 Nos./ 1.01 kms.
	Govt. offices damaged	1 Nos.
5	Panchayati Raj & DW Department	
	Anganwadi Center damaged	147 Nos.
	Primary School Buildings damaged	249 Nos.
	GP/ PS Building & Community Hall damaged	142 Nos.
	GP/ PS road damaged	3385.56 kms.

Funds sanctioned

Funds released to Collectors for assistance towards damage of private properties in 2021 for Heavy Rain & Flood during September 2021 (Rs in Lakh)

Sl. No	District	HBA	Clothing	Utensil	Agri. Input Subsidy	Fishery Sector	Sandcast	GR in Kind
1	Angul	75.79	0.31	0.34	1.27	-	-	-
2	Balasore	28.26	-	-	730.43	-	-	12.49
3	Balangir	102.68	0.04	0.04	2.92	-	-	-
4	Bargarh	7.36	-	-	0.56	0.82	0.11	0.74

5	Bhadrak	2.97	0.05	0.06	426.69	-	-	-
6	Boudh	38.23	-	-	7.02	0.32	-	-
7	Cuttack	156.93	-	-	1,534.65	13.56	-	-
8	Deogarh	0.18	-	-	-	-	-	-
9	Dhenkanal	11.08	0.02	0.02	65.74	7.05	-	-
10	Jagatsinghpur	49.58	-	-	2,868.16	30.46	-	3.54
11	Jajpur	230.52	-	-	2,343.79	2.82	-	-
12	Jharsuguda	-	-	-	7.25	-	-	-
13	Kandhamal	5.35	-	-	-	-	-	-
14	Kendrapara	5.33	-	-	123.46	1.27	-	34.90
15	Keonjhar	5.17	0.02	0.02	-	-	-	-
16	Khordha	11.30	-	-	216.88	0.29	-	-
17	Koraput	1.50	-	-	-	-	-	-
18	Mayurbhanj	74.77	0.22	0.24	77.87	0.78	-	-
19	Nayagarh	7.67	-	-	-	-	-	-
20	Nuapada	10.92	0.11	0.12	-	-	-	-
21	Puri	47.19	-	-	1,524.10	5.82	-	-
22	Subarnapur	24.55	-	-	2.97	-	-	-
23	Sunadargarh	15.58	0.11	0.12	0.20	-	-	-
Grand Total		912.88	0.86	0.96	9933.96	63.18	0.11	51.67

Funds released to Departments due to Heavy Rain & Flood of September 2021

(Rs in Lakh)

Sl No.	Department	Purpose	Amount allotted
1	RD Dept	Repair/ Restoration of RD roads and CDs/Bridges	703.87
2	Works Dept	Repair/ Restoration of PWD roads & Bridges	361.74
3	Water Resources	Repair/ Restoration of river embankment and canals	1649.53
4	H & UD Dept	Repair/ Restoration of urban roads	5.315
5	Panchayati Raj	Repair/ Restoration of GP/PS roads, Primary Scool building, Anganwadi Centres	5780.09
6	Fisheries & ARD	Supply of Cattle feed	148.254
Total			8648.799

3.2.Cyclone "YAAS"-2021 (26th–27thMay, 2021)

Preparedness: -

In view of possible cyclone concerned Departments and Collectors of 12 coastal and adjoining districts (Gajapati, Ganjam, Nayagarh, Puri, Khordha, Cuttack, Jagatsinghpur,



Kendrapada, Jajpur, Bhadrak, Balasore and Mayurbhanj) were alerted and advised to undertake following preparedness measures to effectively handle the disaster.

Preparedness of Districts

- The District Administration of vulnerable districts were directed to keep MCS/ MFS in readiness and to identify other suitable RCC roofed public buildings for use as safe shelters in case of requirement.
- 634 MCS/MFS, excluding those being used as TMC for COVID-19, and 7092 other RCC buildings with cumulative capacity to accommodate more than 12 lakh people, maintaining social distancing norms, were kept ready in 12 districts.
- It was also directed to arrange for Food, Drinking Water, Lighting, Sanitation and Health facility at each shelter and keep the Tower Light and Chain Saw and other emergency equipment available in MCS/ MFS in readiness to meet any eventuality.
- 486 no. of DG sets, 1513 no. of inflatable tower lights and 1497 no. of chain saws were kept in readiness at shelter level.
- Arrangements were made to divert the inflatable tower lights available in Puri, Cuttack and Ganjam districts to Balasore, Bhadrak, Kendrapada and Jagatsinghpur districts.
- Collectors of districts likely to be affected to assess the situation and identify the people living near the coast/ low lying areas, people living in vulnerable condition in hut or kutcha house & take steps to evacuate them to MCS/ MFS or other identified safe buildings and organise all basic needs like food, drinking water, lightning, sanitation and health facilities for them.



- Collectors of Balasore, Bhadrak, Kendrapada and Jagatsinghpur were requested to take immediate steps to remove all hoardings in ULB areas and roadside hoardings put in rural areas.
- 4 Senior IAS Officers were deputed to Balasore, Bhadrak, Kendrapara and Jagatsinghpur districts to provide guidance and support to the District Administrations in management of the Cyclone.
- Besides, 4 Senior IPS Officers were deputed to above mentioned 4 districts to provide guidance & support to the District Superintendent of Police for management of the cyclone.
- Evacuation: 2,00,346 people were evacuated to the safe shelters. As many as 1885 no. of pregnant women were shifted to the hospitals/ Maa Gruhas.

Preparedness of Departments:

I. Electricity:

- Advance action was taken Odisha Power Transmission Corporation Limited (OPTCL) and Distribution Companies (DISCOMs) for mobilizing technical gangs and materials to take up restoration immediately after the cyclone. Gangs with Gen Sets, gas cutters and vehicles were kept in readiness for immediate deployment.
- 340 no. of gangs, each comprising 10 work men, 4305 no. of poles, 365 km of conductors, 116 KM of AB Cable, 115 no. of DTR, 3850 no. of insulators were mobilized and prepositioned by CESU, NESCO and SOUTHCO.
- PGCIL and NTPC deputed 30 gangs each with necessary equipment for prepositioning in NESCO area.
- 17 nos. of ERS Towers were also mobilised to the affected areas.
- As power supply was likely to be shut down before the cyclone, the life line institutions including Government offices were asked to make power back up arrangement (Genset with sufficient fuel).
- 24X7 Control room was set up in OPTCL/ GRIDCO for sharing of information.
- District wise nodal officers were allotted for monitoring the situation.



II. **Telecom:**

- Meetings were held with all Telecom Service Providers (TSPs) for taking necessary preparedness measures to keep the Telecom/ Internet Service functional during cyclone situation and to restore the communication in case of any damage due to cyclone. The TSPs made necessary arrangements for functioning of all the DG sets with fuel reserve of 24 hours. Movable DG sets were kept ready at central locations for movement.
- All the TSPs kept Cell-on-Wheels in readiness for deployment in case there is damage to mobile towers in district due to impact of AMPHAN. All the telecom operators were advised to be ready with adequate numbers of technical manpower for restoration of any affected telecom towers and Optical Fiber Cables (OFC).

III. **Drinking water:**

Panchayati Raj and Drinking Water (PR&DW) Department:

- 276 DG sets were kept ready for Rural Pipe Water Supply (PWS) projects in 12 districts for uninterrupted water supply in absence of electricity.
- 805 vehicles loaded with PVC tanks and 75 water tankers were in readiness for use.
- 199 mobile repair units (each comprising of two SEMs) and 106 local electricians were kept ready for taking up repair work on emergency basis.
- 2724 no. of overhead tanks were kept loaded with water.
- 1828 bags of bleaching powder were supplied for disinfection.



Housing & Urban Development Department:

- 113 DG sets, 95 tankers and 246 PVC tanks were arranged for deployment in the ULB areas of Balasore, Bhadrak, Kendrapada, Jagatsinghpur and Mayurbhanj districts for ensuring uninterrupted water supply.
- 20 storage reservoirs were kept for continuous pumping operation to ensure availability of adequate stock for 24 hours post cyclone.

IV. **Health preparedness:**

- Mobile health teams were deployed in affected areas.
- Power back up arrangement was made in all hospitals with sufficient quantity of fuel.

- Sufficient stock of essential medicines, anti snake venom was kept.
- Arrangement was made for screening all migrant workers in Temporary Medical Centres (TMC) located within 3 km of the coastline and to send the COVID negative cases to home quarantine and positive cases to COVID facilities immediately.
- Nodal Officers were identified for districts and blocks for continuous monitoring of disaster response activities.
- Contingency plans were made for opening of Medical Relief Centers and providing treatment to the trauma patients at health facilities.
- Plans were made for shifting of pregnant women from interior areas to delivery point/ Maa Gruha.
- Contingency plan for sanitation was in place and stocking of bleaching power/ ORS/ Halogen tablets at PHC, CHC, DHHs and up to ASHA level was ensured.

V. **Fishery and Animal Husbandry:**

- Fishermen Warnings were issued to Collectors and fishermen were advised not to venture into sea. District Administration along with officials of Fisheries Department was in close coordination with the marine fishermen in the matter.
- All 4115 number of boats that had gone to sea for fishing returned to shore by 17th May and no boat was allowed enter into sea from 18th.
- 22,050 number of boats in 6 coastal districts and Chilika area of Khurhdadistrict berthed in safe places like fishing harbour and fish landing centres.
- Awareness campaign on protection of animal resources from possible cyclone situation was launched in electronic as well as print media.
- Supply of required medicines and vaccines to the CDVOs for distribution to vulnerable areas was expedited.
- People were advised to shelter the cattle and domestic animals at safe places. They were advised to evacuate their cattle to the ground floor of the MCS/ MFS and other suitable buildings in case of necessity.

VI. **Agriculture:**

- Agro based crop advisory, prepared by OUAT and Directorate of Agriculture for protection of matured and harvested paddy as well as non-paddy crops along with other crop protection practices was issued by the A&FE Department for wide circulation among the field functionaries and farmers.
- Crop advisories were disseminated through All India Radio, Community Radio Stations across the state and Door Darshan.

- Out of a crop coverage area of 2,65,800 hectares in north and south coastal districts 1,37,400 hectares were harvested in a week time.
- Awareness camps and miking were done in different villages to take the harvested crops/ grains to a safer place and to cover the crops/grains by polythene sheets.

VII. **Water Resources:**

- 12 senior level Engineers were deputed to each of the identified 12 districts since 17.05.2020.
- All critically vulnerable and vulnerable locations of embankments were restored and sufficient flood fighting materials were kept in position.
- In view of anticipated rain fall, the major and medium reservoirs were depleted.
- The field Engineers were on high alert and in touch with District Administrations.
- 24x7 Control rooms in each Division, Circle and CE Office were operationalised.

VIII. **Rural Development:**

- Executive Engineers of vulnerable districts were instructed to take all precautionary measures with men, machine, roller, etc. in vulnerable locations of different roads, so as to avoid any dislocation in road communication system.

Communication:

- The Collectors, State Disaster Response Forces and other officers having Satellite Phones were directed to recharge and keep the phones ready for use. The Digital Mobile Radio installed in six coastal districts were also tested and kept ready for use for communication with Collectors, BDOs and others in case the telephone / cell phone networks are down due to cyclone. The V-sat communications at State HQ and in 3 districts (Khordha, Jajpur and Cuttack) were also in readiness.

Dissemination of Warnings:

- As many as 2.17 crore cyclone warning messages were sent through SMS to the mobile phone subscribers of the likely affected areas.
- Early warning voice messages were disseminated through Alert Siren Systems installed in coastal areas under Early Warning Dissemination System (EWDS).
- District Administration disseminated the warning through official channels and PRI members. Public address systems were used for dissemination at local level.
- Fisheries & ARD Dept. communicated the warning messages to marine/ Chilika fishermen.

- All cyclone bulletins and warning messages of IMD were disseminated with key State Level Officers, Collectors and Media.
- Community Level Volunteers and Task Force Team members of Multipurpose Cyclone/ Flood Shelters were engaged for ensuring family preparedness, warning dissemination and expediting evacuation.
- Social Media platforms were effectively used not only for dissemination of warnings but also for sending vital information to the general public for safety and survival.

Review Meetings:

- The Hon'ble Chief Minister reviewed the preparedness through Video Conferencing on 16.05.2020 with the concerned Depts. & Collectors of 12 vulnerable districts.
- The Chief Secretary reviewed the preparedness through VC on 19.05.2020 with the concerned Departments and Collectors of Bhadrak, Balasore, Kendrapada and Jagatsinghpur districts.
- SRC & ACS, Disaster Management reviewed through video conferencing with Collectors of Balasore, Bhadrak, Kendrapara, Jajpur, Jagatsinghpur, Cuttack, Puri, Khordha and Mayurbhanj regarding preparedness measures taken by them.
- Cabinet Secretary, Govt. of India discussed with the Chief Secretary & Special Relief Commissioner on 16.5.20 and 18.5.20 about preparedness.

Response:

Deployment of Disaster response forces

20 NDRF teams, 16 ODRAF teams and 231 Fire Service team were deployed in 6 coastal and 6 nearby districts. 100 teams of OFDC were also deployed in 6 districts. Fire Officers & Deputy Fire Officers were deputed to each of the vulnerable districts for coordination among Fire Service Teams. Balance 4 ODRAF teams, 17 teams of Fire Service and 20 OFDC teams were kept in standby to be pressed into service.



Sl. No.	Name of the district	NDRF	ODRAF	Fire Services	OFDC Teams	Total Teams
1	Ganjam	0	0	33	0	33
2	Khordha	0	2	17	0	19

3	Cuttack	0	1	21	0	22
4	Kendrapada	3	3	18	10	34
5	Jagatsinghpur	4	1	15	10	30
6	Jajpur	1	1	18	0	20
7	Puri	1	0	15	0	16
8	Bhadrak	4	3	18	10	35
9	Balasore	6	4	21	35	66
10	Mayurbhanj	1	1	32	10	44
11	Nayagarh	0	0	0	0	0
12	Gajapati	0	0	09	0	09
13	Keonjhar	0	0	14	25	39
Total		20	16	231	100	367

Evacuation/ Free Kitchen:

2,00,346 people were evacuated from vulnerable areas to 4314 shelters. They were provided with dry food, drinking water and free kitchen. Besides this, Chuda, Gud, Biscuits, matchbox and candle were also provided.

Sl. No.	Name of the district	No. of Shelters	No. of People Evacuated
1	Balasore	720	49564
2	Bhadrak	561	31017
3	Cuttack	428	10961
4	Gajapati	14	1547
5	Jagatsinghpur	299	16840
6	Jajpur	171	7140
7	Kendrapara	622	39864
8	Keonjhar	2	258
9	Khurdha	103	3172
10	Mayubhanj	1029	27216
11	Nayagarh	1	55
12	Puri	364	12712
Total		4314	200346

Administration of Emergent Relief

Sl. No.	Name of the district	Rice in Qtl	Chuda in Qtl	Gur in Qtl	No. of Beneficiary
1	Balasore	85.80	278.00	44.50	2526
2	Bhadrak	0	12.40	2.46	31017
3	Kendrapara	0	1165.43	119.27	39864
4	Jagatsinghpur	0	95.87	20.04	13575
5	Cuttack	16.21	98.45	22.41	10961
6	Khordha	1.48	3.13	0.92	1189
7	Puri	0.0	26.65	5.32	2893
8	Mayurbhanj	150.0	206.0	45.0	3500
Total		253.49	1885.93	259.92	105525

Impact:

The damages caused by the cyclone were mainly due to gusting action of wind and heavy rainfall on 26th& 27thMay, the water level had risen in the rivers Subarnarekha, Baitarani, Budhabalanga, for which floods occurred in these rivers affecting the downstream areas of the districts & storm surge in 84 coastal villages of Balasore district and 44 villages of Chandbali Block in Bhadrak district.

As per report received from Collectors, 87.42 lakh people in 13541 villages of 125 Blocks and 533 wards of 35 Urban Local Bodies (ULBs) in 11 districts have been affected. Extensive damage have occurred to agriculture/ horticulture crop & livestock/ poultry of farmers, net & boat of fishing communities, equipment, accessories & raw materials/ finished goods of traditional artisans/ weavers. Besides, substantial damage has been caused to public properties.

Extent of Damages

Abstract of extent of damages due to severe cyclonic storm "YAAS" is indicated below;

Sl. No.	Name of the district	Blocks affected	GPs affected	Villages affected	ULBs affected	Wards affected	Population affected (in Lakh)	House damaged	Human lives lost
1	Balasore	12	360	2762	4	68	18.799	3474	1
2	Bhadrak	7	218	1372	4	79	15.060	8404	
3	Cuttack	14	373	1959	4	113	0.360		
4	Dhenkanal	7	72	202	3	19	0.354	46	
5	Jagatsinghpur	8	198	1321	2	40	11.969	1	

6	Jajpur	10	311	1647	2	22	20.000	998	
7	Kendrapara	9	129	1592	2	42	15.230	601	
8	Keonjhar	13	165	1108	5	49	0.475	2283	1
9	Mayurbhanj	26	308	1219	4	61	4.557	2050	1
10	Puri	11	172	263	4	36	0.576	0	
11	Sundargarh	8	76	96	1	4	0.035	237	
Total		125	2382	13541	35	533	87.42	18094	3

House Damage

Total 18094 houses (including 1100 huts) and 3024 cow sheds attached to houses have been damaged due to due to cyclone. The district-wise details is as given in the following table.

Sl. No	Name of the district	Fully damaged		Severely damaged		Partially damaged		No. of hut damaged	Total no. of house damaged including hut	No. of Cow shed damaged
		No. of Pucca house	No. of Kutcha house	No. of Pucca house	No. of Kutcha house	No. of Pucca house	No. of Kutcha house			
1	Balasore		5		33	115	2974	347	3474	242
2	Bhadrak		12		8	7	8152	225	8404	1554
4	Dhenkanal				3	1	42		46	
5	Jagatsinghpur						1		1	
6	Jajpur				4	9	682	303	998	501
7	Kendrapara				0	1	541	59	601	239
8	Keonjhar		8		26	49	2199	1	2283	310
10	Mayurbhanj	2	9	2	49	49	1774	165	2050	172
12	Sundargarh		4		16	4	213		237	6
Total		2	38	2	139	235	16578	1100	18094	3024

Agriculture/ horticulture crop Loss (SMF):

2197.34 hectares of agriculture, horticulture and perennial crops have sustained crop-loss to the extent of 33% and above due to cyclone associated with flood/ heavy rain and storm surge out of total affected agriculture/ horticulture crop of 5672.99 hectares. The district-wise details is as given bellow.

Sl. No.	Name of the district	Total agriculture/ horticulture crop area affected (area in Ha.)	Total area of crop loss of 33% & above (area in Ha.)			
			Rainfed	Irrigated	Perennial	Total
1	Balasore	510.00	5.60	98.27	19.66	123.53
2	Bhadrak	1319.00	269.60	615.60	1.50	886.70
3	Jagatsinghpur	39.50	0.00	8.96	0.00	8.96
4	Jajpur	1768.00	154.50	339.50	0.00	494.00
5	Kendrapara	277.00	36.00	185.00	9.92	230.92
6	Keonjhar	646.91	41.60	165.47	0.60	207.67
7	Mayurbhanj	1020.89	11.11	146.17	0.60	157.88
8	Puri	7.00	0.00	3.00	0.00	3.00
9	Sundargarh	84.69	0.00	84.69	0.00	84.69
Total		5672.99	518.41	1646.66	32.28	2197.34

Livestock affected

1358578 livestock and 1115810 poultry birds were affected due to cyclone & heavy rain/ flood and storm surge. The district-wise figures of affected livestock are given in following table.

Sl. No.	Name of the district	Livestock affected			Poultry affected
		Large	Small	Total	
1	Balasore	220656	103986	324642	234213
2	Bhadrak	419116	95221	514337	653450
3	Cuttack	1	0	1	0
4	Jajpur	80186	15433	95619	8717
5	Kendrapara	294600	110906	405506	216890
6	Keonjhar	3463	4214	7677	392
7	Mayurbhanj	4339	6457	10796	2148
Total		1022361	336217	1358578	1115810

Livestock Lost:

72milch and draught animals and 28502 poultry birds have lost their lives due to cyclone. The district-wise details in as given in following table.

Sl. No.	Name of the district	No of Livestock/ Birds lost					
		Milch Animal		Draught Animal		Poultry Birds	Total nos. of livestock lost including poultry birds
		Buffalo/ Cow	Sheep/ Goat	Camel/ Horse/ Bullock	Calf/ Donkey/ Pony		
1	Balasore	3	5		5	24426	24439
2	Bhadrak	12	3		9	3816	3840
3	Jajpur	2	2		2		6
4	Kendrapara	16	3		2	260	281
5	Keonjhar	3			2		5
6	Mayurbhanj	2	1				3
Total		38	14	0	20	28502	28574

Fisheries Sector affected:

40 nos. of boat and 14 nos. of net have been fully/ partially damaged due to cyclone and consequent heavy rain/ flood and storm surge. Similarly, 1257.72 Ha. of fish pond and 333.734 Ha. of fish seed farm have been affected in the calamity. The district-wise detail is as in following table.

Sl. No.	Name of the district	Boat damaged		Net damaged		Fish pond damaged		Fish Seed farm damaged	
		No. fully damaged	No. partially damaged	No. fully damaged	No. partially damaged	No.	Area in Ha.	No.	Area in Ha.
1	Balasore	18	11			510	137.39	1074	308.77
2	Bhadrak		5			1876	781.93	5	2.40
3	Jajpur					27	8.8	0	0
4	Kendrapara					1001	328.00	50	21.00
5	Mayurbhanj	3	2	11	3	9	1.6	8	1.564
6	Sundargarh	1							
Total		22	18	11	3	3423	1257.72	1137	333.734

Loss of livelihood of handloom weavers and handicraft artisans:

In the cyclone, 5022 traditional handicraft artisans and 48 handloom weavers have been affected due to damage to their equipments and raw materials/ finished goods. The district-wise details as given in following table

SI No	Name of the district	No. of handicraft artisans affected	No. of handloom Weavers affected
1	Balasore	3542	16
2	Bhadrak	858	26
3	Keonjhar	302	0
4	Mayurbhanj	320	6
Total		5022	48

Damage to roads with breaches:

730.62 kms.of PWD roads including breaches, 625.65 kms. of rural roads, 49.79 kms. of urban roads, 625.65 kms. of GP/ PS roads and 56.72 kms. of NH maintained by state have been damaged due to the cyclone. The district-wise abstract is as in following table.

Sl. No.	Name of the district	PWD road	Rural road	Urban road	GP/ PS road	NH maintained by state	Total length of road with breaches
		Kms.	Kms.	Kms.	Kms.	Kms.	Kms.
1	Balasore	203.79	429.54	8.33	4749.56		5391.22
2	Bhadrak	112.92	130.05	27.21	4336.02	8.51	4614.71
3	Cuttack			3.90			3.90
4	Dhenkanal	36.85		2.25			39.10
5	Jagatsinghpur					15.20	15.20
6	Jajpur	131.28		1.00	1342.67	10.10	1485.05
7	Kendrapada	112.07	34.79		790.18	8.17	945.21
8	Keonjhar	14.00	19.77	1.55	279.97	6.48	321.77
10	Mayurbhyanj	119.72	11.50	5.50	280.00	5.00	421.72
11	Puri					3.26	3.26
Total		730.62	625.65	49.74	11778.41	56.72	13241.14

Damage to public buildings:

4 nos. of PHC/ CHCs, 1002 nos. of Anganwadi Centers (AWCs), 684 nos. of GP/ PS building, and 2377 nos. of primary/ secondary buildings have been damaged due to the cyclone. The district/ department-wise details is as follows.

Sl. No.	Name of the district	PHC/ CHC	AWC	GP/ PS buildings	Primary/ Secondary School			
			PR & DW dept.		PR & DW dept.	H & UD dept.	Works dept.	Total
1	Balasore	1	128	178	629	7	16	652
2	Bhadrak		313	322	448	7	2	457
3	Dhenkanal			1	31			31
4	Jagatsinghpur						4	4
5	Jajpur	1	172	146	363		3	366
6	Kendrapada		173	0	552		5	557
7	Keonjhar	1	51	21	90	1	1	92
8	Mayurbhyanj	1	165	16	208		10	218
Total		4	1002	684	2321	15	41	2377

Damage to Irrigation Sector:

443.38 Kms.of River/ saline embankment(including breaches) have been fully/ partially damaged due to cyclone. 133.47kms. of canal, 25.26 kms.of drainage channel, 797 nos. of Lift Irrigation Projects and 10.95 kms. of roads in minor irrigation projects have been damaged due to the calamity. The district-wise details is as follows.

Sl. No.	Name of the district	River/ Saline embankment	Restoration of Canals		Drainage Channel	LIP	Minor Irrigation Project damaged	
		Length of embankment fully/ partially damaged with breaches in Kms.	No. of canals partially damaged	Length of canals partially damaged	Length of road/ drainage channel damaged in Km	No. of Lift Irrigation Project damaged	Length of road damaged in MIP in Km	No. of CD Bridges damaged in MIPs
1	Balasore	245.63	45	49.57	5.70	83	0.22	6
2	Bhadrak	62.65	58	44.39	19.56	34	0.03	1
3	Jajpur	0.02					0.45	11
4	Kendrapara	135.08	13	39.51		72		
5	Keonjhar					386	0.35	25
6	Mayurbhanj					175	9.89	7
7	Sundargarh					47		
Total		443.38	116	133.47	25.26	797	10.95	50

Damage to Electricity infrastructure:

3 nos. of feeder transformer, 29259 nos. of poles, 23305 kms.of conductors and 1975 nos. of distribution transformer have been damaged due to cyclone.

Sl. No.	Name of the item	TPNODL	TPCODL	TPWODL	TPSODL	DISCOM Total
1	Feeder Transformer damaged (Nos.)	3				3
2	33 KV Poles damaged (Nos.)	1054	23			1077
3	33 KV conductor damaged (Nos.)	1338	42			1380
5	11 KV Poles damaged (Nos.)	8204	2169	309	7	10689
6	11 KV conductor damaged (Nos.)	10037	813	141	2	10993
7	Distribution Transformer damaged (Nos.)	1528	310	131	6	1975
8	LT line poles damaged (Nos.)	14192	3040	247	14	17493
9	LT line conductor damaged (kms.)	8814	1804	312	2	10932

Damage to Drinking Water System :

845 nos. of rural drinking water system and 18 nos. of urban drinking water system have been damaged due to the cyclone. The district-wise details are given in following table.

Sl. No.	Name of the district	Nos. of rural DWS damaged	No. of urban DWS damaged
1	Balasore	137	18
2	Bhadrak	523	
3	Kendrapara	47	
4	Mayurbhanj	103	
5	Puri	35	
Total		845	18

Total Damage & Loss to public & private properties due to Cyclonic Storm "YAAS"-2021

Sl. No.	Departments/ Items	Quantity	Actual Loss
			(Rs. in Lakh)
1	Commerce & Transport Department		
	Damage to Infrastructure of State Transport Authority		2.01
	Damage to Infrastructure of State Transport Authority		299.86
	Damage to infrastructure of Directorate of Printing, Stationary & Publication		15.00
	Total		316.87

2	Cooperation Department		
	Damage to infrastructure of Cooperative Societies	92 Nos.	228.58
	Damage to Govt. office building	1 No.	3.00
	Other infrastructure damaged	35 Nos	19.62
	Total		251.20
3	Energy Department		
	Damage to Transmission Line of OPTCL		67.70
	Feeder Transformer damaged	3 Nos.	205.00
	33kv pole damaged	1077 Nos.	43.00
	33kv conductor damaged	1380 Kms.	690.00
	33kv VCB damaged	5 Nos.	30.00
	11kv poles damaged	10689 Nos.	427.00
	11kv conductor damaged	10993 Kms.	5497.00
	11kv VCB damaged	9 Nos.	30.00
	Distribution Transformer damaged	1975 Nos.	1975.00
	LT line pole damaged	17493 Nos.	700.00
	LT line conductor damaged	10932 Nos.	5466.00
	Minor material damaged		64.00
	Civil Works		96.00
	Erection Charges		365.00
	Total		15655.70
4	Electronics & Information Technology Department		
	ADSS Fiber 48F damaged	2.5 kms	5.61
	ADSS Fiber 24F damaged	32.73 Kms	65.04
	8 mter PSC pole damaged	51 Nos.	5.24
	Total		75.89
5	Fisheries & Animal Resources Department		
	Damage to Infrastructure of ARD Sector		193.10
	Damage to Infrastructure of Fisheries Sector		263.54
	Total		456.64
6	Forest & Environment Department		
	Damage to road/ CDs/ Bridges/ Embankment/ Inspection Path		101.28
	Loss to trees/ wildlife/ Eco-Tourism facilities/ Plantation/ Nurseries/ Water bodies		239.26
	Total		340.54

7	Housing & Urban Development Department		
	Road damaged	212 Nos./49.74	951.88
	Culvert/ Bridge damaged/ washed away	28 Nos.	202.20
	Drain damaged	63 Nos./ 8.92 Kms.	570.70
	Clearance of debris from road/ public area		14.40
	Hiring of DG Sets for emergent supply of drinking water	928 Nos.	315.82
	Hiring of Water Tanker	469 Nos.	40.18
	Drainage of flood water		8.95
	Chlorination, cost of chemical etc.		11.91
	Engagement of Labour		22.38
	Other Expenditure		325.69
	Tube well damaged	18 Nos.	2.50
	Street Lights damaged	232 Nos.	42.62
	Primary/ Secondary School Building damaged	15 Nos.	81.80
	Govt. Office/ establishment damaged	23 Nos.	150.00
	Battery Operated Vehicle damaged	1 Nos.	1.50
	Total		2742.53
8	MSME Department		
	Damage to infrastructure	52 Nos.	66.81
	Damage to plant & Machinery	20 Nos.	28.41
	Total		95.22
9	Panchayati Raj & DW Department		
	Anganwadi Center damaged	1002 Nos.	1532.78
	Primary School Building damaged	2321 Nos.	3912.15
	GP/ PS Building & Community Hall damaged	684 Nos.	1202.3
	GP/ PS road damaged	11778.41 Kms.	16686.55
	Damage to drinking water systems/ PWS systems	845 Nos.	683.32
	Emergent supply of drinking water in rural area		473.63
	Total		24490.73
10	Rural Development Department		
	Damage to rural roads including breaches	509 Nos./ 623.07 kms.	4744.34
	Breaches in rural roads	98 Nos./ 2.56 Kms.	
	CD/ Bridges damaged/ washed away	230 Nos.	3110.10
	Drain damaged	9 Nos./ 3.47 Kms.	88.00

	Residential building damaged	20 Nos.	296.50
	Other Hospital building damaged (Res. & non-res.)	2 Nos.	9.00
	RD Dept. building damaged	15 Nos.	75.00
	Revenue Dept. building damaged	24 Nos.	91.50
	Home Dept. building damaged	9 Nos.	35.50
	Debris cleared on roads/ public area		55.76
	Hiring of DG Set.		0.35
	Engagement of Labour		1.46
	Other Expenditure		82.71
	Total		8590.22
11	School & Mass Education Department		
	Damage to infrastructure of Elementary & Secondary School	2267 Nos.	3154.055
	Books damaged	1583 Nos.	0.284
	Total		3154.34
12	Water Resources Department		
	Breaches in river/ saline embankment	126 Nos./ 6.80 Kms.	2808.60
	Partial damage in river/ saline embankment	140 Nos./ 436.58 Kms.	6764.06
	Partial damage to canals	116 Nos./ 133.47 Kms.	756.84
	Damage in drainage Channel	25.26 Kms.	293.50
	Cost towards drainage clearance	454.08 Kms.	472.18
	Damage to Lift Irrigation Projects	797 Nos.	362.23
	Damage to roads/ embankment with breaches of MI sector	127 braches/10.945Kms	691.50
	Damage to CD/ bridges of MI sector	50 Nos.	120.00
	Total		12268.91
13	Works Department		
	Damage to PWD Roads	254 Nos./ 730.62 Kms.	4918.05
	Damage to CD/ Bridges	68 Nos.	716.00
	Breaches on PWD road	23 Nos./182 mtr.	26.30
	Damage to secondary School Buildings	41 Nos.	107.70
	Damage to CHC	4 Nos.	14.00
	Damage of hospital buildings other than PHC & CHC	24 Nos.	158.50
	Damage to Govt. offices	105 Nos.	174.60

	Damage to Govt. Qtrs./ Ibs/ Guest Houses etc.	99 Nos.	151.70
	Damage to NHs maintained by State	10 Nos./ 63.22 Kms.	69.12
	Damaged to drain	13 Nos./ 2.85 Kms.	255.00
	Debris cleared on roads/ public area	525.29 Kms.	182.56
	Hiring of DG Sets	28 Nos.	35.30
	Engagement of Labour		0.32
	Other Expenditure		2.43
	Cost of preparedness such as Mobilization of QRT		130.00
	Total		6941.58
14	Women & Child Development Department		
		103 Nos.	103.27
	Total (Public Properties)		75483.64
	Pure Relief Items		
	Ex-gratia for loss of lives	3 Nos.	12.000
15	House building assistance	18094 house+3024 cowshed	823.451
	Assistance for Clothing & Utensils	1281 no. households	48.678
	Gratuitous Relief		3000.000
	Cost of evacuation, search & rescue measure		148.420
	Expenditure on relief camps		1597.220
	Temporary Shelter	13046 Nos.	208.736
	Agriculture input subsidy-SMF	5672.99 has.	263.360
	Replacement of milch/ draught animals & poultry birds	72 Nos. + 28502 Nos	16.680
	Assistance to fisherman for repair/ replacement net & boat	Net-14 nos., Boat-40 nos.	3.199
	Assistance for damaged fish pond	1257.72 ha.	153.442
	Input subsidy for fish seed farm	333.734 ha.	27.366
	Cost of Cattle feed		148.760
	Assistance for handicraft artisans	5022 artisans	411.804
	Assistance for handloom weavers	48 weavers	1.968
			6865.084
	Grand Total		82348.724

Fund released to districts: (Rs. In lakh)

Sl. No	Name of the district	Human Ex-gratia	House Building Assistance	Assistance for clothing & utensils	Agriculture Input subsidy	Assistance for replacement of animal	Assistance for damaged Nets & boats	Assistance for Fish Pond	Assistance for fish seed farm	Gratuitous Relief	Transpiration Cost	Expenditure for Search & Rescue	Total amount released to districts
1	Balasore	4.00	156.595	1.444	17.186	3.306	2.179	16.762	25.319	449.530	116.710	16.920	809.951
2	Bhadrak		322.107	0.760	101.709	5.238	0.205	95.395	0.197	331.970		30.847	888.428
3	Cuttack			0.000						69.531	17.573		87.104
4	Dhenkanal		4.249	0.114						12.512		0.969	17.844
5	Ganjam			0.000							1.103		1.103
6	Jagatsinghpur		0.032	0.000	1.210					40.978		5.327	47.547
7	Jajpur		49.040	0.152	56.339	0.980		1.074		77.542		13.227	198.354
8	Kendrapada		24.802	0.000	29.209	5.310		40.016	1.722	380.562		0.392	482.013
9	Keonjhar		111.801	1.292	26.347	1.220				52.126		3.088	195.874
10	Khordha			0.000						15.733		6.460	22.193
11	Mayurbhanj		128.655	6.536	20.596	0.630	0.719	0.195	0.128	163.114		14.548	335.121
12	Puri			0.000	0.405					17.409		6.750	24.564
13	Sundargarh		26.170	0.760	11.433		0.096			6.493		1.369	46.321
	TOTAL	4.00	823.451	11.058	264.434	16.684	3.199	153.442	27.366	1617.500	135.386	99.897	3156.417

Fund released to departments: (Rs. In lakh)

Sl. No.	Name of the department	Rs. in lakh.
1	Energy department	14064.22
2	Housing & UD department	735.72
3	Rural Development department	3580.76
4	Works department	2276.47
5	Panchayati Raj & DW department	23807.41
6	Handlooms, Textile & Handicrafts department	413.77
7	Water Resources department	2013.93
9	Home (ODRAF/ OFS) department	31.92
10	Forest & Env. (OFDC) department	28.49
11	Airlift Charge of NDRF personnel	1068.055
	Total	48020.745

3.3 Cyclone "Gulab"-2021 (24th–28th September 2021)

Deployment of Disaster Response Forces (ODRAF/ NDRF/ Fire Service)

Sl. No	Name of the district where deployment is made	ODRAF Teams Deployed (10 members team)	NDRF Teams Deployed (15 members team)	Fire Teams Deployed (8 members team)	Total
1.	Ganjam	15	6	28	49
2.	Gajapati	6	4	08	18
3.	Rayagada	6	4	10	20
4.	Koraput	3	4	18	25
5.	Malkanagiri	6	2	07	15
6.	Nawarangpur	3	-	10	13
7.	Nayagarh	-	4	10	14
8.	Kandhamal	3	-	12	15
9.	Reserve	6	8	23	37
Grand Total		48	32	126	206

Evacuation/ Free Kitchen:

0.50 lakh people were evacuated from vulnerable areas to 1243 shelters. They were provided with dry food, drinking water and free kitchen. Besides this, Chuda, Gud, Biscuits, matchbox and candle were also provided. Hand wash, Sanitizer, Soaps and 3 ply mask were arranged for the people in each shelters for the evacuees. The detail district-wise evacuation status is as follows.

Sl. No	Name of the district	No. of Shelters	Person Evacuated	Pregnant women shifted to Maa Gruha/ CHC/ PHCs
1	Ganjam	265	13192	333
2	Gajapati	153	7752	134
3	Rayagada	85	4255	0
4	Kandhamal	109	5829	83
5	Koraput	323	8321	779

6	Malkangiri	279	10227	133
7	Nawarangpur	6	167	27
8	Puri	3	35	0
9	Kalahandi	8	120	44
10	Khordha	12	245	0
Total		1243	50143	1533

Impact & Damage: -

The damages caused by cyclone "Gulab" were mainly due to gusting action of wind and rainfall on 26th& 27thSeptember, 2021.

As per report received from Collectors, 1.35 lakh people in 682 villages under 40 Blocks and 15 wards of 6 Urban Local Bodies (ULBs) in 5 districts have been affected. Damage have occurred to agriculture/ horticulture crop in Koraputdistrict&one livestock in Gajapati district. Besides, damage have also been caused to house and to public properties in the affected districts.

Extent of Damages:

Abstract of extent of damages due to cyclonic storm "Gulab" is indicated below;

Sl. No.	Name of the district	Blocks affected	GPs affected	Villages affected	ULBs affected	Wards affected	Population affected	House damaged
1	Gajapati	3	17	32	1	11	2818	2
2	Koraput	14	66	195	2	2	3461	616
3	Malkanagiri	7	42	320	2	6	124242	83
4	Nabarangpur	5	18	21			239	
5	Rayagada	11	62	114	1	2	4455	50
Total		40	205	682	6	21	135215	751

House Damage:

Total 751 no. of houses (including 2 no. of huts) and 3 nos. of cow shed have been damaged due to due to cyclone. The district-wise details is as given in the following table.

Houses damaged due to Cyclonic storm "Gulab" -2021										
Sl. No	Name of the district	Fully damaged		Severely damaged		Partially damaged		Hut damaged	Total nos. of house damaged including hut	Cow shed damaged
		Pucca house	Kutch house	Pucca house	Kutch house	Pucca house	Kutch house			
1	Gajapati						2	0	2	0
2	Koraput		1		7	1	605	2	616	1

3	Malkanagiri				5	13	65	0	83	2
4	Rayagada		2	3	6	2	37	0	50	0
Total		0	3	3	18	16	709	2	751	3

An amount of **Rs.48,12,100/-** has been paid to the districts towards house building assistance for house damaged due to the cyclone.

Agriculture/ horticulture crop Loss (SMF):

198.229 hectares (Rainfed- 179.629 ha., Irrigated- 12.20 ha. & Perennial- 6.4 ha.) of agriculture/ horticulture crops have sustained crop-loss to the extent of 33% and above only in Koraput district due to the cyclone.

An amount of Rs.15,01,377/-has been paid to Koraput district towards Agriculture Input Subsidy (AIS) for crop loss due to the cyclone.

Livestock Lost:

One small milch animal has lost its life due to the cyclone in Gajapati district. An amount of Rs.3,000/- has been paid to the Collector, Gajapati towards replacement of animal due to the cyclone.

Damage to roads with breaches:

32.00 kms.of PWD roads including breaches, 83.28 kms. of rural roads, 0.02 kms. of urban roads,532.73kms. of GP/ PS roads and 29.80 kms. of NH maintained by state have been damaged due to the cyclone. The district-wise abstract is as in following table.

Sl. No.	Name of the district	Rural roads		Urban roads		PWD roads		NH		GP/ Ps roads		Total	
		Length of roads & breaches in Km.	Amount in Rs.	Length in Km.	Amount in Rs.	Length in Km.	Amount in Rs.	Length of roads & breaches in Km.	Amount in Rs.	Length in km	Amount in Rs.	Length of roads & breaches in Km.	Amount in Rs.
1	Gajapati	1.70	12.00			9.51	19.00			192.73	289.10	203.94	320.10
2	Koraput	81.50	135.30	0.02	3.50	21.04	19.55	3.80	78.00	31.00	46.50	137.36	282.85
3	Malkanagiri	0.08	2.00			1.20	3.00	26.00	20.00	308.10	462.15	335.38	487.15
4	Rayagada					0.25	3.50			0.90	0.90	1.15	4.40
Total		83.28	149.30	0.02	3.50	32.00	45.05	29.80	98.00	532.73	798.65	677.83	1094.5

Damage to public buildings:

138 nos. of Anganwadi Centres (AWCs), 42 nos. of GP/ PS building/ Community halls, and 209 nos. of primary School buildings under PR & DW department have been damaged due to the cyclone. The district-wise details is as follows.

Sl. No.	Name of the district	AWC damaged		Primary School Buildings damaged		GP Buildings/ Community Hall		Total Buildings damaged	
		No	Amount in Rs.	No	Amount in Rs.	No	Amount in Rs.	No	Amount in Rs.
1	Gajapati	0	0.00	0	0.00	1	2.00	1	2.00
2	Koraput	36	72.00	52	104.00	3	6.00	93	186.00
3	Malkanagiri	102	204.00	157	314.00	38	76.00	297	594.00
Total		138	276.00	209	418.00	42	84.00	391	782.00

Loss to public & private properties due to Cyclonic Storm "GULAB"-2021

Sl. No.	Departments/ Items	Quantity	Actual Loss
			(Rs. in Lakh)
1	Energy Department		
	11kv poles damaged	155 Nos.	6.20
	11kv conductor damaged	272.3 Kms.	136.15
	Distribution Transformer damaged	159 Nos.	159.00
	LT line pole damaged	100 Nos.	4.00
	LT line conductor damaged	45.43 Kms.	22.72
	Total		328.07
2	Housing &UD Department		
	Road damaged	1 No./ .2 kms	3.50
	Culvert/ Bridge damaged	2 Nos.	7.00
	Hiring of DG Sets	37 Nos.	4.97
	Hiring of Water Tanker	10 Nos.	0.60
	Chlorination, cost of chemical etc.		0.04
	Engagement of Labour		0.31
	Other Expenditure		10.69
	Total		27.11
3	Panchayati Raj & DW Department		
	AnganwadiCenter damaged	138 Nos.	276.00
	Primary School Building damaged	209 Nos.	418.00
	GP/ PS Building & Community Hall damaged	42 Nos.	84.00
	GP/ PS road damaged	557 Nos./ 532.73Kms.	798.65
	Total		1576.65
4	Rural Development Department		
	Damage to rural roads including breaches	47 Nos./ 72.01 kms.	651.34
	Breaches in rural roads	80 Nos./ 6.51 kms.	
	CD/ Bridges damaged/ washed away	27 Nos.	175.00
	Hiring of Water Tanker		0.60
	Debris cleared on roads/ public area		6.10
	Hiring of DG Set.		0.60
	Engagement of Labour		0.35
Total		833.99	

5	Works Department		
	Damage to PWD Roads	31 Nos./ 31.95 Kms.	241.00
	Breaches in PWD roads	3 Nos./ .05 Kms.	2.20
	Damage to CD/ Bridges	27 Nos.	105.05
	Damage to drain of PWD division	8 Nos./ 3.25 Kms.	68.20
	Debris cleared on roads/ public area	5.03 Kms	3.33
	Damage to NHs maintained by State	2 Nos./ 29 Kms.	104.00
	Breaches & Culverts damaged in NH maintained by State	6 Nos./ 0.8 Kms.	
	Damage to drain of NH division	1 Nos./ 0.05 Kms.	2.50
	Debris cleared from NH	12 Kms.	10.00
	Draining of flood water/ cleaning of drains		3.70
	Engagement of Labour/ machine etc.		2.60
	Total		542.58
6	Fisheries & Animal Resources Department		
	Damage to Infrastructure of ARD Sector	3 Nos.	13.50
	Total (Public Properties)		3321.90
7	Private Properties damaged & Pure relief		
	House damaged	751 houses+3 cowsheds	48.12
	Assistance for Clothing & Utensils	26 families	0.99
	Agriculture input subsidy-SMF	198.23 Ha.	15.01
	Replacement of small milch animals	1 No.	0.03
	Cost of evacuation, search & rescue measure		1.97
	Expenditure on relief camps/ free kitchen		32.66
	Clearance of debris from roads		0.53
	Total		99.32
	Grand Total		3421.22

Fund released to districts

Sl. No.	Name of the district	House Building Assistance	Agriculture Input subsidy	Assistance for replacement of animals	Free Kitchen/ GR	Transpiration Cost	Expenditure for Search & Rescue	Total amount released to districts
1	Cuttack					5.919		5.919
2	Gajapati	0.064		0.030				0.094
3	Kandhamal				5.815		0.138	5.953
4	Koraput	27.667	15.014		8.943		1.309	52.933
5	Malkanagiri	7.893			18.659		0.549	27.101
6	Rayagada	12.497			0.049		0.500	13.046
	Total	48.121	15.014	0.030	33.466	5.919	2.495	105.045

Fund released to departments

Sl. No.	Name of the Dept/ Item	Amount Released in lakh
1	Works Department	125.888
2	Housing & Urban Development Dept.	12.961
3	Panchayati Raj & DW Department	1724.650
4	Rural Development Department	173.660
	Grand Total	2037.159

3.4 Cyclone "Jawad" - 2021

Preparedness:-

Hon'ble Chief Minister had reviewed the IMD prediction & status of preparedness on 01.12.2021. Chief Secretary and Special Relief Commissioner & Addl. Chief Secretary had taken preparedness/ review meetings with the Collector of Ganjam, Gajapati, Nayagarh, Puri, Khordha, Jagatsinghpur, Cuttack, Kendrapara, Jajpur, Bhadrak, Balasore, Mayurbhanj, Keonjhar and Dhenkanal district and with Secretaries of line departments through virtual platform. Besides, Special Relief Commissioner & Addl. Chief Secretary had also taken separate meeting with NDRF, ODRAF, Fire Services Officers regarding preparedness/ deployment of response forces and with DoT regarding preparedness of Telecom Service Providers (TSPs)

Dissemination of IMD warnings & Bulletins:

- IMD weather Bulletins & cyclone warnings were disseminated to Collectors, Departments and other stake holders at regular intervals.
- Special Relief Commissioner & Addl. Chief Secretary briefed the Media twice daily regarding status of cyclone and precautionary measures to be taken.
- Early warning voice messages were disseminated through Alert Siren Systems installed in Puri district under Early Warning Dissemination System (EWDS).
- District Administration disseminated the warning through official channels and PRI members. Public address systems were used for dissemination at local level.
- Fisheries & ARD Department communicated the warning messages to fishermen.
- Community Level Volunteers and Task Force Team members of Multipurpose Cyclone/ Flood Shelters were sensitised through GBAS (1012 SMSs were sent) for ensuring preparedness and evacuation at shelter level.
- Social Media platforms were effectively used not only for dissemination of warnings but also for sending vital information to the general public for safety and survival.

- 2,29,93,823 warning/ alert messages were sent to people of Cuttack, Ganjam, Gajapati, Jagatsinghpur, Kendrapara, Khordha and Puri district on 2nd & 3rd December through CAP portal of Govt. of India.

Preparedness of Districts:

- As per the warning information of IMD on forecast of rain & squally/ gale wind, the district administrations of Ganjam, Gajapati, Nayagarh, Puri, Khordha, Jagatsinghpur, Cuttack, Kendrapara, Jajpur, Bhadrak, Balasore, Mayurbhanj, Keonjhar and Dhenkanal were asked to keep the administrative machinery fully prepared to meet the possible situation. Concerned districts were instructed to closely monitor the situation and to take following preparatory measures.
- Control Rooms of all the offices dealing with disaster management were operated round the clock with adequate manpower.
- Cyclone and flood shelters in the coastal districts were kept in readiness for sheltering people observing COVID protocol, if required.
- People from kutcha houses and low-lying areas were evacuated to nearest safe buildings.
- Special care was taken to shift the old, physically challenged, women and children to shelters much before the cyclone approaches.
- Cooked food through free kitchen, safe drinking water, lighting, health & sanitation facilities were arranged for evacuated people housed in shelters.
- Pregnant women having their EDD within 15 days were shifted to the nearest Govt. hospital having proper facilities for child birth.
- Necessary advance arrangements were made through the concerned departments for restoration of the damaged roads immediately after the cyclone subsides.
- Mobile health and veterinary teams were organised in advance and kept in readiness for deployment in the affected areas. Feed & fodder was arranged for the animal population.
- Flood fighting materials were kept ready at strategic places and immediate action may be taken to prevent any breach or to close the breach, damage of roads.
- Urban Local Bodies were instructed to make advance arrangements for dewatering from the areas likely to face water logging.
- Necessary steps were taken to prevent fishermen to venture into the sea till the cyclone subsides. Fishermen on the sea are being informed to return to the coast by 2nd December positively.
- Crop advisory were issued to the farmers to save the paddy and other crops.

- Arrangements were made for immediate restoration of essential services like power, telecommunication, roads, etc.
- The overhead tanks and sumps in drinking water supply systems were filled up before the heavy rain and high wind starts.
- ODRAF, Fire Service and NDRF teams were prepositioned to ensure quickest response time for Search & Rescue (SAR) operation and clearance of relief lines.
- Satellite phones of all Collectors were kept in readiness for communication if telecommunication fails.
- Collectors were instructed to make back-up power arrangement/ generators arrangements with adequate fuel in the different offices including health institutions.
- Arrangement for providing temporary shelter materials (polythene sheet) had been made for the households if houses will be damaged due to effect of cyclonic wind/ heavy rain.
- Collectors of Ganjam, Puri, Khordha, Cuttack, Jagatsinghpur, Kendrapara were instructed to evacuate the vulnerable people / people living in kutcha houses and shift them to Multipurpose cyclone/ flood shelters and other safe shelters by 03.12.2021.
- Leave was cancelled for the Government employees of Ganjam, Puri, Khordha, Cuttack, Jagatsinghpur, Kendrapara districts.
- Schools were closed in Ganjam, Gajapati, Puri, Nayagarh, Jagatsinghpur, Kendrapara, Koraput, Rayagada, Cuttack, Khordha, Kandhamal, Keonjhar, Angul, Dhenkanal, Balasore, Bhadrak, Jajpur, Malkangiri, Mayurbhanj district.

Preparedness of Departments:

Keeping in view of ensuing cyclonic circulation over Bay of Bengal various line departments were instructed to take following preparedness measures in 14 probable vulnerable districts i.e. Ganjam, Gajapati, Nayagarh, Puri, Khordha, Jagatsinghpur, Cuttack, Kendrapara, Jajpur, Bhadrak, Balasore, Mayurbhanj, Keonjhar and Dhenkanal well in advance to reduce the impacts of the cyclone.

- Control Rooms were operated on 24x7 basis to coordinate with the district level officials, state level departments and SRC office during the ensuing cyclonic circulation.
- A detailed plan of action regarding operation of the Control Room was prepared with the name, designation, land line & mobile number of the officers managing the

control room to be shared with the district level line department offices and SRC office.

- A senior officer was identified to function as the Nodal Officer of the department to coordinate with SRC office and others. The name, designation, e-mail id, land line number and mobile number of the Nodal Officer was shared with SRC office.

I. Fisheries & ARD Department:

- The department made necessary arrangement for adequate stock of veterinary medicines in veterinary hospitals/ dispensaries at different levels and also ensured supply of cattle feed and post cyclone vaccination of cattle in the event of cyclone/ consequent flooding, if required.
- The fishermen were advised not to venture into the sea in view of ensuing cyclonic circulation. Besides, for the fishermen already in the sea all possible steps were taken to bring them to the coast.

II. Water Resources Department:

- The engineers in charge were kept in readiness to close watch over the embankments especially weak/ vulnerable points in rivers/ canals. Flood fighting materials like bullah, bamboo, sand bags etc. were kept in readiness

III. Panchayati Raj & DW/ Housing & UD Department

- The department were instructed to make necessary arrangement for provision of safe drinking water, supply of halazone tablets, bleaching powder, restoration of roads for clearance of relief lines etc. and to keep all of their men & machineries/ emergency equipment in readiness for the ensuing cyclonic circulation/ heavy rain.
- Advance steps were taken for dewatering flood water in low lying areas.
- Alternative power supply arrangement was made at drinking water supply points.
- Adequate precautionary measures were taken for safety of the people in open drains and potholes areas during heavy rain/ flash flood situation.

IV. Food Supply & Consumer Welfare Department:

- The department was instructed to ensure necessary arrangement of food stuffs & PDS commodities and other requirements like chuda, gud, other ready-to-eat materials, candle, match box, etc. in advance in remote/ inaccessible pockets likely to be affected by cyclone / heavy rain.

V. **Health & Family Welfare Department:**

- The department was instructed to take necessary steps for provision of emergency medicines (Antipyretic, antibiotics, Anti diarrhoeal, ORS, Halazone/chlorine tablets, Anti snake venom, IV fluids etc.) in sufficient quantity in hospitals at different levels, plan for deployment of mobile health teams and opening of medical relief centres in the stated districts to be affected by cyclonic circulation/ heavy rain.
- Alternative water & power supply to the hospitals, storage of adequate rations for in-patients in hospitals, storage of POL for generators etc. were ensured in all PHCs, CHCs, DHH and other hospitals.
- Mobile health and veterinary teams had been kept in readiness at the district level.

VI. **Works/ Rural Development Department:**

- The departments were instructed to make all necessary arrangements for immediate restoration of roads for clearance of relief lines, if required and to keep all of their men & machineries/ emergency equipment in readiness.

VII. **Women& Child Development Department:-**

- The department was instructed to ensure necessary arrangement for care of children, women. Special care will be taken for pregnant women / nourishing mothers,
- The department was instructed to take necessary steps to sensitize the AW Workers. All pregnant women having their Expected Date of Delivery (EDD) within 15 days were shifted to the nearest Govt. hospital having adequate child birth facilities to avoid any emergency.

VIII. **Energy Department**

- All vulnerable locations and facilities were identified in advance and a comprehensive plan of action was prepared for the quickest restoration of the damaged energy infrastructure in the districts to be affected by cyclonic circulation/ heavy rain.
- It was also been instructed to keep their man and machinery in readiness with stocking of additional poles, wires, transformers.
- Necessary steps were taken for early restoration of electricity supply specially in hospitals and water supply systems etc.

IX. Agriculture & Farmers' Empowerment Department:

- The Department was instructed to take necessary steps to issue advisory to the farmers to save their paddy and other crops.

Response :-

Deployment of Disaster Response Forces

Sl. No.	Districts	ODRAF Teams deployed (10 member Team)	NDRF Teams deployed (15 member Team)	Fire Teams deployed (8 Member Team)	Total Teams deployed
1	Ganjam	9	6	30	45
2	Gajapati	6	2	10	18
3	Puri	3	2	18	23
4	Khordha	-	4	17	21
5	Cuttack	-	-	19	19
6	Jagatsinghpur	3	2	14	19
7	Kendrapada	3	2	14	19
8	Jajpur	3	2	11	16
9	Bhadrak	3	2	13	18
10	Balasore	3	2	12	17
11	Reserve	27	10	14	51
Total		60	34	172	266

Evacuation/ Free Kitchen:

Around four thousand people were evacuated from vulnerable areas to 121 shelters. They were provided with dry food, drinking water and free kitchen. Besides this, Chuda, Gud, Biscuits, matchbox and candle were also provided. Hand wash, Sanitizer, Soaps and mask were arranged for the people in shelters for the evacuees. Besides, required Covid safety protocols were also observed in shelters. The detail district-wise evacuation status is as follows.

Sl. No.	District	No. of shelters	No. of persons evacuated	No. of pregnant women shifted to nearest hospitals
1	Cuttack	14	294	-
2	Ganjam	27	149	226
3	Jagatsinghpur	13	359	-
4	Kendrapara	13	482	126
5	Khurdha	1	81	-
6	Puri	53	2499	14
Total		121	3864	375

Impact:-

The cyclone "Jawad" mainly affected 12 coastal and adjoining districts of odisha i.e. Balasore, Bhadrak, Cuttack, Dhenkanal, Gajapati, Ganjam, Jagatsinghpur, Jajpur, Kendrapara, Keonjhar, Khordha, Mayurbhanj, Nayagarh and Puri. In this cyclone agriculture/ horticulture crop have been damaged extensively. Besides, there was minor damage to other public and private property.

Agriculture/ Horticulture Crop Loss:

As the cyclone impacted Odisha during harvesting season of crops like paddy and sowing season of rabi crops and vegetables. Hence, extensive damage has caused to the ripen paddy crop, harvested crop on field, cotton, vegetable cultivation etc. due to gusting action of wind and heavy rainfall on 4th & 5th December, 2021. It is found that the ripe/ harvested crops in field have been mostly damaged in coastal low-lying areas due to poor water draining capacity.

As per final field verification reports received from the Collectors of affected districts crop area of **394916.22 hectares** in 11970 villages under 2117 Gram Panchayats of 100 Blocks and 203 wards of 28 ULBs in 12 districts have been affected due to heavy rain in the impact of cyclone "Jawad" during 4th & 5th December, 2021 having sustained crop loss of 33% and above. The district-wise details is as follows.

Sl. No.	Name of the district	Nos. of Block affected	Nos. of GP affected	Nos. of Village affected	Nos. of ULB affected	No. of Wards affected	Total Crop loss of 33% & above (area in Ha.)			
							Irrigated	Rainfed	Perennial	Total
1	Bhadrak	7	168	931	4	49	5660.95	37723.77	0.00	43384.72
2	Cuttack	11	265	1298	1	3	28389.08	15126.83	0.00	43515.91
3	Dhenkanal	3	35	73			15.00	473.50	0.00	488.50
4	Ganjam	22	440	2382	14	54	46210.16	23175.08	42.34	69427.58
5	Jagatsinghpur	8	194	1093	1	20	22175.50	9738.00	0.00	31913.50
6	Jajpur	4	99	442			9245.00	11809.82	0.00	21054.82
7	Kendrapara	9	188	1113	2	20	11419.14	40238.90	6.22	51664.26
8	Keonjhar	1	4	8			135.00	5.00		140.00
9	Khordha	10	191	1399	2	28	13617.37	40307.65	0.00	53925.02
10	Mayurbhanj	10	172	1233			799.27	8503.59	0.00	9302.86
11	Nayagarh	5	144	880	2	17	4155.51	24244.02	0.00	28399.53
12	Puri	10	217	1118	2	12	19444.05	22255.46	0.00	41699.51
Total		100	2117	11970	28	203	161266.03	233601.63	48.56	394916.22

Special Package for Farmers announced by Hon'ble Chief Minister:-

In order to ameliorate the sufferings of farmers who have sustained crop loss, on 27.12.2021 Hon'ble Chief Minister, Odisha has announced a special package of Rs 507 crore for the farmers affected in cyclone 'Jawad' during 4-5th December, 2021. The details of the package are as follows.

1. **Agriculture input subsidy** will be provided to the small and marginal farmers who have sustained crop **loss of 33%** and above @Rs. 6,800/- per hectare of land in rain fed/non irrigated areas, Rs.13,500/- per ha of land in areas under assured irrigation, and Rs.18,000/- per hectare for all types of perennial crops. Perennial crops will include mango, cashew, coconut, kewra, betel vine etc. The assistance shall be provided to the actual cultivators. Agricultural input subsidy to any affected farmer shall not be less than **Rs.2000/- for perennial crops and Rs.1000/- for other crops.**
2. **Quality Certified seeds:** Seeds to the tune of 12000 Qtl shall be provided to the farmers of affected districts at subsidized cost with additional 25% of existing subsidy cost through DBT sale during Rabi 2021-22.
3. **Pulse minikits :** Farmers of affected districts will be provided with 50,000 free pulse seed minikits.
4. **Vegetable seed minikits :** Farmers of affected districts will be provided with 4,00,000 free vegetable seed minikits.
5. One million members of the **Self-Help Group (SHG)**, who are cultivating fruits and vegetables will be provided with plastic crate. Each member will be provided with 5 crates at a discount of 90%. This will reduce the risk of post-harvest damage. One million farmers will be provided with 10 fruit saplings each for free of cost to plant in the backyard of their houses.
6. One million farmers will be supported by **Hybrid Family Farming**. Each farmer will get a subsidy of Rs 4,000 per 0.20 hectares.
7. **Farm Mechanization Subsidy** of Rs. 50 crores shall be provided to the farmers of affected districts through DBT.
8. **5,000 pump sets** shall be provided with 50% subsidy limited to a maximum of Rs.10, 000/-.
9. **5,000 Sprayers** will be made available to the affected farmers at a subsidy of 50% limited to maximum of Rs.3800/- for power sprayers and Rs.750/- for hand operated sprayers.

10. **Subsidy towards need based PP (inputs)** for disease-pest control in the affected districts shall be provided to the farmers through DBT for 16,000 ha.
11. **Farm Credits** Short term loans advanced in the affected areas during Kharif 2021 having crop loss of 33 % and above shall be converted in to medium term (conversion) loan.
12. All out effort will be made to ensure **Institutional Finance** for Crop Loan and Agricultural loan for coming Rabi season.
13. Expeditious steps will be taken to organise **Joint Liability Groups (JLGs)** by covering maximum number of share croppers / oral lessees to provide them credit during the current Rabi season.
14. Expeditious steps will be taken to complete survey for assessment of post harvest loss and assess end of season crop loss through conducting crop cutting experiments to settle the claims of the affected insured **farmers under crop insurance scheme, PMFBY.**
15. Farmers affected by 'Cyclonic rain Jawad' shall be provided **Fresh Finance** for Rabi cultivation during current Rabi season. **Visit of Inter-Ministerial Central Team (IMCT)**

An Inter-Ministerial Central Team (IMCT) had visited the state under the leadership of Sh. Saurav Ray, Joint Secretary (CEPI), Ministry of Home Affairs, Govt. of India from 11th -13th December, 2021 for an on-the-spot assessment of the situation in the wake of cyclonic storm "Jawad". The members from various departments like Agriculture, Finance, Fisheries, Power, Rural Development and Road Transport & Highways were the part of the team. The team in three groups were visited six cyclone "Jawad" affected districts i.e. Jajpur, Kendrapara, Jagatsinghpur, Cuttack, Puri and Ganjam on 12th & 13th December, 2021.

After on-the-spot assessment of the situation in said six districts by IMCT, Chief Secretary, Odisha, Special Relief Commissioner and Commissioner-cum-Secretary to Govt., Agriculture & Farmers empowerment Department had discussed with the team regarding the ground level situation and assistance required thereof from Government of India.

The IMCT had opined that there is extensive damage to agriculture/ horticulture crop specially ripen/ harvested paddy, cotton and vegetable crops in coastal districts due to unseasonal cyclonic rain in the impact of cyclone 'jawad'. The State Govt. requested the GoI through IMCT to enhance the amount of assistance for different items in SDRF/ NDRF norms as present amount is quite unrealistic in comparison to the quantity of damage

Fund Released to districts:

Agriculture Input subsidy:

As per norms of assistance under SDRF/ NDRF an amount of **Rs.376,64,56,537/-** was released towards agriculture input subsidy for the farmers affected due to heavy rain in the impact of cyclone "Jawad". The district-wise funds released is as follows.

Sl. No.	Name of the district	Fund Released (Rs. in Lakh)
1	Bhadrak	3329.44
2	Cuttack	4861.15
3	Dhenkanal	34.22
4	Ganjam	7821.90
5	Jagatsinghpur	3655.88
6	Jajpur	2051.14
7	Kendrapara	4278.95
8	Keonjhar	18.57
9	Khordha	4579.27
10	Mayurbhanj	686.15
11	Nayagarh	2209.59
12	Puri	4138.32
Total		37664.57

3.5 COVID- 19

The Government of Odisha has responded to the COVID-19 pandemic successfully with large-scale economic relief measures. This being a biological disaster, while Health & Family Welfare Department is the nodal department for coordinating all technical response, the regulatory and other measures are being coordinated by the Special Relief Commissioner.

The Government of Odisha declared COVID- 19 as a "Disaster" under the Disaster Management Act, 2005 and issued various orders and Standard Operating Procedures (SOPs) under the said Act and the Epidemic Diseases Act, 1897 for compliance by citizen and organisations with a view to preventing the spread of the disease. Elaborate arrangements were made for handling the people of Odisha who returned to the State due to pandemic related problems and vice versa. In response to unlock orders issued by MHA, GOI, the State Govt. had allowed reopening of different activities in a phased manner.

Various measures taken up by the State Government for containment of COVID- 19 in the State were:

- i. SoP was prepared for the Migrant Workers, Pilgrims, Tourist, Students and other persons stranded in Odisha to move their home.
- ii. Similarly, SoP for smooth movement of such persons stranded outside the State who intend to come to the State was formulated and SoP for border check points have also been formulated and communicated to all concerned officials.
- iii. Elaborate Protocols for handling the returnees travelling by Rail to the State was also prepared. SoP for return of Indian Nationals (hailing from Odisha) stranded outside the country was also prepared and communicated.
- iv. Elaborate arrangements on reception, transport, food arrangements, security were made for them.
- v. In view of huge influx of migrants, the Government adopted multi-pronged approaches such as monitoring of migrant's movement, issue of online e-pass, contact tracing and setting up of Border Check Points (BCPs).
- vi. Arrangement for providing food to all sick, indigent, destitute persons, beggars, stranded migrant workers and other people in distress were made during the lockdown period.
- vii. Detailed Guidelines for conducting marriage, thread ceremony/ bratopanayana and funeral related rituals were prepared and communicated to all concerns.
- viii. In view of resurgence of SARS-CoV2 virus in many parts of India and some areas of the State, quarantine provisions had been made with certain stipulations.

- ix. With a view to facilitating smooth movement of oxygen tankers/ oxygen cylinder carrying vehicles, green corridors were made available at the toll gates so as to allow the vehicles to pass within 5 minutes maximum.
- x. A control room is functioning 24*7 in the State Emergency Operation Centre (SEOC) in office of Special Relief Commissioner. Besides, a COVID Control room was also operated in SEOC from 10 PM to 5 AM every day to address the emergent problems/ needs/ issues faced by district Administrations in management of Health, Law & order, Fire and Administrative issues relating to COVID-19 management.
- xi. In view of the Cyclonic storm YAAS, vulnerable people have been evacuated to safe shelters and they were provided with adequate health facilities for the containment of COVID-19. The timing of street corner, road-side shops, stand-alone shops, OMFED shops, milk booths dealing with milk, milk products, bread and shops dealing with food and essential items. Vegetable, fish, meat, egg and milk was relaxed in some districts.
- xii. In view of spreading of SARS Cov-2 infection in some parts of the State, districts were categorized as Category- A and B districts on the basis of COVID case load, positivity rate and other relevant parameters. Stipulations for these categorized districts had been made accordingly.
- xiii. Relief support and other logistics for the migrant people who returned to the State due to pandemic related problems and vice versa was provided.
- xiv. Procedure for Home/ Institutional Quarantine of returnees to home districts was communicated to the concerned Collectors/ Municipal Commissioners/ Departments. All essential activities were allowed to be continued during the lockdown period.
- xv. A detailed guideline for Management of Temporary Medical Camps (TMCs)/ Cluster TMCs/ Covid Care Centres (CCCs)/ Covid Care Homes (CCHs)/ Quarantine Centres etc. was formulated and intimated to all collectors, Municipal Commissioner, Panchayati Raj & Drinking Water Dept. and Housing & Urban Development Dept.
- xvi. SoP for return of Indian Nationals (hailing from Odisha) stranded outside the country was also prepared and communicated to concerned Authorities.
- xvii. The Car Festival (Sri Gundicha and Bahuda Yatra) of Lord Jagannath was conducted smoothly. Prohibition was made for the sale and use of fire during the festive month (October/November-2021).

- xviii. Guidelines for surveillance, containment of COVID- 19 and reopening of activities was carried out in the State considering the infectious stage of COVID- 19.
- xix. Opening and closing time of all shops, commercial establishments, offices, institutions (except for essential activities) was scheduled from time to time considering the spread co-efficient of COVID- 19
- xx. Religious festivals like Good Friday, Easter, Pana Sankranti/ Jhamu Jatra, Danda Jatra, Dolayatra, Holi, Sriram Navami and associated religious and cultural congregations which usually attract huge crowd, were regulated/ prohibited in the interest of preventing spread of COVID-19.
- xxi. With a view to normalizing economic activities, all activities and establishments were allowed to remain fully functional from the beginning of the month of September, 2021 with some stipulations and exclusions such as prohibition of all social, religious, political and cultural gatherings, exhibitions, trade fairs, melas etc.
- xxii. An App/ software namely **CAPS (COVID ex-gratia Assistance Payment System)** has been developed exclusively for payment of ex-gratia assistance of Rs. 50,000/- to the NoK of the persons died due to COVID- 19 in the State.

Early lockdown, effective containment strategy, setting up of the TMCs, Cluster TMCs, CCCs, CCHs, quarantine centres etc. to manage the huge influx of migrants, multi sectoral collaboration, community-based disaster management, community engagement and mentoring support programs, Public Awareness Campaign through IEC (Information, Education and Communication) activities with the active involvement of the community are some of the key takeaways of the Odisha's response strategy that have contributed to Odisha's success in tackling the COVID- 19 pandemic proactively.

It may be stated that undeniably, the second wave of the COVID- 19 pandemic placed a greater strain on the people as well as the resources of the State than the first wave. However, effective governance in collaboration with different Departments of State Government, district administration, police and other officials & community-based response strategy enabled the resilient state Odisha to contain the spread of the virus. The State's COVID-19 management strategy offers important insights that kept the caseload low despite the huge influx of migrants. Emphasizing upon Saving lives and livelihood of people during the COVID- 19 pandemic, State Government took and implemented various measures in the State successfully.

Funds amounting to Rs. 8431.000 lakh, Rs. 74831 lakh and Rs. 341.600 lakh have been released out of State Disaster Response Fund (SDRF) to the District Collectors, Health & Family welfare department and Housing & Urban development department respectively for management of COVID-19 for the year 2021-22. Besides, Funds amounting to Rs. 167.247 lakh has been released out of State Disaster Response Fund (SDRF) to Odisha State Disaster Management Authority (OSDMA) towards payment to Indian Institute of Public Health (IIPH) to conduct the study on COVID-19.

3.6 Hailstorm

2 districts namely Gajnam and Rayagadawere affected due to hailstorm accompanied by whirlwind and 3 persons lost their lives under the impacts of the disaster during the year 2021-22. Steps have been taken for payment of ex-gratia @ Rs.4.00 lakh to next of kins of each of the deceased. Besides, funds have been placed with the concerned Collectors for payment of assistances like agriculture input subsidy, house building assistance, assistance for clothing and utensils to the affected people as per the Norms of assistance from SDRF.

3.7.State Specific Disasters

3.7.i. Heat Wave

Heat-wave condition was prevailed in the State during the month of April and June. Government had taken numbers of precautionary measures to tackle the heat wave situation in the state. Measures taken by the Government include launching of Public Awareness Campaign through electronic and print media, mitigation of water scarcity problem in the identified water scarcity pockets both in the rural and urban areas by supply of drinking water through tankers, opening of "JaIaChhatras" at market places, bus stands and other congregation points by involving civil society organisations, construction/ repair of vats for roaming livestock, provision of water for the animals in reserved/ protected forests, rescheduling the timing of classes and examinations of schools and colleges, rescheduling the timings for engagement of labourers/ workmen at worksites, provision of portable drinking water, ORS packets and rest-shed at worksites, ensuring adequate stock of life saving medicine, saline, ORS in all dispensaries, PHCs, CHCs and District Headquarters Hospitals, Arrangements of special beds for treatment of heat-stroke patients in all hospitals & ensuring uninterrupted power supply during the summer months, etc.

Control Rooms at the State and the District levels were operationalized round the clock to monitor the situation and the response activities.

Despite all the precautionary measures taken to meet the possible heat wave situation, 8 persons lost their lives due to heat wave during the year 2021. Steps are being taken to provide ex-gratia assistance @ Rs.50,000/- to the bereaved families out of the SDRF.

3.7.ii. Lightning

281 Persons lost their lives due to lightning in 30 districts during the year 2021-22. Steps have been taken to provide ex-gratia assistance @ 4,00,000/- per deceased to Next of Kins of the victims from SDRF. The district-wise number of human casualties is indicated below:

Sl. No	Name of the District	No. of death	No. of cases where ex-gratia has been paid to the NoKs	Sl. No	Name of the District	No. of death	No. of cases where ex-gratia has been paid to the NoKs
1	Angul	7	6	16	Kandhamal	4	3
2	Bolangir	6	4	17	Kendrapara	6	5
3	Bargarh	15	11	18	Keonjhar	26	20
4	Balasore	5	4	19	Khurda	8	7
5	Bhadrak	8	8	20	Koraput	16	13
6	Boudh	2	2	21	Malkanagiri	6	5
7	Cuttack	18	14	22	Mayurbhanj	18	18
8	Deogarh	2	2	23	Nawarangpur	8	8
9	Dhenkanal	13	10	24	Nayagarh	4	4
10	Ganjam	5	3	25	Nuapara	8	5
11	Gajapati	26	22	26	Puri	8	3
12	Jagatsinghpur	6	6	27	Rayagada	12	11
13	Jajpur	8	7	28	Sambalpur	8	8
14	Jharsuguda	3	3	29	Sonepur	4	4
15	Kalahandi	10	9	30	Sundergarh	11	10
TOTAL						281	235

3.7.iii Boat Accident

11 Persons lost their lives due to Boat capsizing in Mayurbhanj district during the year 2021-22. Ex-gratia assistance @ 400,000/- per deceased has been provided to Next of kin of the victims from the SDRF. The district-wise number of human casualties is given below:

3.7.iv. Drowning

1209 persons lost their lives due to drowning in 30 districts during the year 2021-22. Steps have been taken to provide ex-gratia assistance @ 4,00,000/- per deceased to Next

of Kins of the victims from SDRF. The district-wise number of human casualties is given below:

Sl.	District	No. of deaths	No. of cases where ex-gratia has been paid to the NoKs	Sl.	District	No. of deaths	No. of cases where ex-gratia has been paid to the NoKs
1	Angul	34	23	16	Kandhamal	18	18
2	Balangir	18	15	17	Kendrapara	59	55
3	Balasore	85	61	18	Keonjhar	97	95
4	Bargarh	7	5	19	Khorda	13	11
5	Bhadrak	73	51	20	Koraput	58	56
6	Boudh	1	1	21	Malkangiri	60	54
7	Cuttack	60	29	22	Mayurbhanj	106	74
8	Deogarh	15	14	23	Nabarangpur	42	39
9	Dhenkanal	37	35	24	Nayagarh	13	13
10	Gajapati	9	8	25	Nuapada	10	10
11	Ganjam	89	88	26	Puri	40	34
12	Jagatsinghpur	26	26	27	Rayagada	4	3
13	Jajpur	56	44	28	Sambalpur	41	40
14	Jharsuguda	25	25	29	Subarnapur	4	4
15	Kalahandi	28	28	30	Sundargarh	81	69
TOTAL						1209	

3.7.v. Snake bite

844 persons lost their lives due to snake bite in 30 districts during the year 2021-22. Steps have been taken to provide ex-gratia assistance @ 400,000/- per deceased to Next of Kin of the victims from SDRF. The district-wise number of human casualties is given below:

Sl. No.	Name of the District	No. of deaths	Sl. No.	Name of the District	No. of deaths
1	Angul	40	16	Kandhamal	14
2	Balangir	12	17	Kendrapara	48
3	Balasore	47	18	Keonjhar	55
4	Bargarh	16	19	Khordha	20
5	Bhadrak	30	20	Koraput	13
6	Boudh	3	21	Malkangiri	58
7	Cuttack	37	22	Mayurbhanj	73

8	Deogarh	28	23	Nabarangpur	24
9	Dhenkanal	44	24	Nayagarh	10
10	Gajapati	3	25	Nuapada	12
11	Ganjam	64	26	Puri	33
12	Jagatsinghpur	11	27	Rayagada	7
13	Jajpur	29	28	Sambalpur	37
14	Jharsuguda	5	29	Subarnapur	3
15	Kalahandi	16	30	Sundargarh	52
Total					844

Chapter-4

Disaster Assistance Monitoring and Payment System (DAMPS)

Earlier, payment of ex-gratia to the next of kin of the persons who lost their lives due to different approved disasters was getting physically processed through case records from the lowest levels of revenue administration and sanctioned at the level of Collector. On receipt of the sanction order from the Collector, it was processed physically and allotment of funds was given to the Collector, who in its turn was transferring the funds to the concerned Tahasildars for payment to the beneficiary. It was a burden on the Collector to submit Utilisation Certificate also. There was neither scope of effective monitoring as the system was based on Physical File Processing. The matter was personally tracked from State level on the basis of complaints. In the process, despite the best intent of the Government the distressed families were not getting their due in time.

To overcome the above situation and for speedy payment of ex-gratia assistance to the bereaved families, Sri Pradeep Jena, Special Relief Commissioner and Additional Chief Secretary thought for an online payment system and for his dynamic guidance and active intervention, the National Informatics Centre, State Centre, Bhubaneswar designed the Application and extended their technical support for creation of the Web Portal called DAMPS (Disaster Assistance Monitoring and Payment System) .Suddenly, on 10.06.2020 the Collectors were instructed to stop sanction of ex-gratia in physical files and the DAMPS portal was introduced which is an administrative initiative in the true spirit of Government's 5T policy framework in augmenting service delivery to the citizen in distress in the remotest parts of the State. It is a digital platform on the design parameters for online processing, monitoring and payment of ex-gratia to the NoK of the disaster victims. The most difficult part in sanction of ex-gratia is collection of Post Mortem Report of the deceased, which is a mandatory document in case of State Specific Disasters, where the number of deaths are very high. To overcome the situation, in consultation with the Home Department, Director General of Police and Finance Department, DAMPS has been integrated with both CCTNS(Crime and Criminal Tracking Network and Systems) and IFMS (Integrated Financial Management System) to streamline the process of disbursement of ex-gratia assistance. The ex-gratia case records are being initiated by the Revenue Inspector on DAMPS portal through Mobile App, processed on line with supervisory control at the levels of Tahasildar, Sub- Collector and digitally transmitted by the Collector to Special Relief Commissioner's

Office for release of payment to the verified bank account of the NoK on Direct Benefit Transfer (DBT) principle. The entire process is on paperless digital path. The total time taken from First Information Report (FIR) of death due to disaster to receipt of payment in the bank account is reduced substantially than the old manual system.

The effort is one of its kinds in the true spirit of the 5T policy of the Government. DAMPS is a classic case of use of **Technology** to reduce unnecessary physical processing hassles. It provides a **Transparent** platform to the citizen to know the time lapse of processing at each level as well as to administrative hierarchy to have better monitoring and control on service delivery. It's comparable to OSWAS at the State level with the uniqueness of connecting the field level administrative reporting machinery and control at each level to ensure better accountability of the Government functionaries. The DAMPS facilitates officers at different levels like Revenue Inspector, Tahasildar, Sub-Collector, Collector, Under Secretary, Additional Commissioner Relief and Special Relief Commissioner to operate as a **Team** to work in tandem to reduce **Time** to have the all- too-precious Last Mile Connectivity in service delivery to the citizen. Needless to say that the effort has brought **Transformation** in the administrative processing of ex-gratia to the NoK of the persons who lose their lives in disasters.

From the **mission & objectives**, the principal components of Disaster Assistance Monitoring & Payment System are:

- a. **Providing a web and mobile app** based solution to the field level revenue officials to report the preliminary Information (PIR) as soon as possible.
- b. **Workflow enabled system** with assigned roles and responsibilities starting from initiation of cases at tahasil level, verification at subdivision level, sanction by collector disbursement by Special Relief Commissioner, Govt. of Odisha.
- c. **Online Payment of financial assistance** to the account of affected Victim/Next of Kins (NoKs) during the disaster through direct benefit transfer (DBT) within the service period as defined by state government.
- d. **Dash board based monitoring and analysis**, spatial linkage to the data using GIS, Performance monitoring, Reporting with quality graphs & charts for short range and long range planning
- e. **Reduce citizens' involvement** and hassle to get First Information Report(FIR) copy from police station for availing the ex-gratia assistance by building trust and assurance on quality by the government.

Some of the **unique/key aspects** of this project are -

- ❖ Preliminary Investigation Report through **web & mobile app**
- ❖ **Online linking & uploading Facility for documents** relevant to verification of cases and payment of ex-Gratia
- ❖ **Process simplification** : Initiation of case and **generation of Digital Order sheet**, Online Sanction/Rejection/Review of cases by Collector & Sub-Collectors and verification of cases at state level before approval & disbursement
- ❖ Facility for **Quick decision making** towards Approval/ Rejection of cases by Special Relief Commissioner(SRC)
- ❖ **Equitable, sustainable and people-centric service provision** with focus on the rural poor
- ❖ Adoption of innovative **state-of-the-art technology & management techniques/tools**(SMS, GIS maps, APIs, Work flow)
- ❖ **Responsive &Accountable:** Workflow enabled system with assigned roles and responsibilities.
- ❖ **Efficient Disbursement of Assistance** to the concerned bank account through IFMS within service period as set by Govt.
- ❖ **Trust based Governance:** Public participation, SMS based status, training and awareness, transparency

Due to introduction of such Web Portal, it has been possible to provide ex-gratia assistance amounting to **Rs.125 crore to 3673 beneficiaries during the year 2021-22**, which is a record in the history of sanction of ex-gratia.

Considering the mission and objectives of the project, the DAMPS has been awarded with the **Gems of Digital India Award 2020** and **19th CSI SIG e-Governance Award,2021** presented by the Computer Society of India.



Chapter-5

REGIONAL CONCLAVE ON DISASTER MANAGEMENT

The First Regional Conclave on Disaster Management was organised by the Tamilnadu State Disaster Management Authority in collaboration with the National Disaster Management Authority (NDMA) and the Ministry of Home Affairs on 8th-9th March,2022 at Chennai. Representatives from all the coastal States and UTs of the Country participated in that conclave and shared their experience and suggestions on disaster management.



Sri Pradeep Jena, ACS & SRC alongwith 4 other Officers of the State Disaster Management Department attended the conclave. The ACS & SRC presented the best practices in managing very severe cyclonic storm "FANI" and other disasters effectively with zero casualty mission and putforth his valuable suggestions on Disaster Management Act, 2005 and gave some suggestions for inclusion in the upcoming items and norms of SDRF/NDRF.



Chapter-6

Status of release of funds out of SDRF Account 2021-22

[Rs. in crore]

1	Opening Balance (As on 01.04.2021)	1262.220
2	SDRF releases during the year 2021-22 (Central & State Share)	
	# Central Share	1283.200
2	# State Share	428.000
3	NDRF releases during the year 2021-22:	500.000
4	Total funds available in SDRF Account (1+2+3)	3473.420
	Expenditure incurred on calamities	
	# Avalanches	-
	# Cloud Burst	-
	# Cyclone	974.260
	# Drought	-
	# Earthquake	-
5	# Fire	19.286
	# Flood	178.072
	# Hailstorm	0.086
	# Landslides	0.081
	# Pest attack	-
	# Tsunami	-
	# Cold Wave	-
	Sub-Total	1171.785
Expenditure incurred during the year 2021-22		
6	Covid-19 expenditure	834.884
7	Expenditure incurred from SDRF on procurement of search and rescue equipments etc.	12.536
8	Expenditure incurred from SDRF Capacity Building Activities	72.495
9	Expenditure incurred from SDRF on	121.898

	State Specific disasters	
10	Total expenditure incurred on all calamities (5+6+7+8+9)	2213.598
11	Balance available in SDRF Account (4 - 10)	1259.822

Status of release of funds out of SDMF Account 2021-22

[Rs. in crore]

1	Opening Balance (As on 01.04.2021)	427.80
2	SDMF releases during the year 2021-22 (Central & State Share)	
	# Central Share	320.80
2	# State Share	107.00
3	NDMF releases during the year 2021-22:	0.00
4	Total funds available in SDMF Account (1+2+3)	855.60
5	Total expenditure incurred	0.00
6	Balance available in SDMF Account (4 - 5)	855.60

Statement showing item-wise details of expenditure incurred as per approved items and norms of SDRMF/NDRMF for the year 2021-22

(Rupees in Lakh)															
Code No.	Items	Calamity													
		Avalanche	Cloud burst	Cyclone	Drought	Earthquake	Fire	Flood	Hailstorm	Landslide	Pest Attack	Tsunami	Cold wave/frost	Covid-19 Expenditure	State Specific Calamity
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Gratuitous Relief														
(a)	Ex-gratia payment to families to deceased persons														
	(i) As per SDRF/NDRF norms	0	0	20.297	0	0	808.000	44.000	0	8.000	0	0	0	8200.000	11557.000
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	7	0	0	202	11	0	2	0	0	0	16400	2888
(b)	Ex-gratia payment for loss of a limb or eyes														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c)	Grievous injury requiring hospitalization														

	(i) As per SDRF/NDRF norms	0	0	0	0	0	2.848	0	0	0.127	0	0	0	0	0.598
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	59	0	0	1	0	0	0	0	16
(d)	Relief for the old, infirm and destitute, children														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(e)	Clothing and utensils/household goods for families whose houses have been washed away/fully damaged/severely inundated for more than a week due to a natural calamity														
	(i) As per SDRF/NDRF norms	0	0	11.058	0	0	12.360	0	1.878	0	0	0	0	0	2.598
	(ii) Outside the norms	0	0	0	0	0	0	0	0.000	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	291	0	0	328	0	52	0	0	0	0	0	64
(f)	Gratuitous relief for families in dire need of immediate sustenance after a calamity														
	(i) As per SDRF/NDRF norms	0	0	2942.455	0	0	0	1937.073	0	0	0	0	0	5341.600	78.142
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Supplementary Nutrition														

	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Assistance to Small and Marginal Farmers (SMF for														
(a)	Desilting of agriculture land														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0.110	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligibe area (ha.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of S&M farmers	0	0	0	0	0	0		0	0	0	0	0	0	0
(b)	Removal of debris on agricultural land in hilly areas														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligibe area (ha.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of S&M farmers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(c)	Desilting/Restoration/Repair of fish farms														
	(i) As per SDRF/NDRF norms	0	0		0	0	0	0	0	0	0	0	0	0	0

	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligible area (ha.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of S&M farmers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(d)	Loss of substantial portion of land caused by landslide, avalanche, change of course of rivers														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligible area (ha.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of S&M farmers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(e)	Agriculture input subsidy where crop loss was 50% / 33% and above														
	(i) As per SDRF/NDRF norms	0	0	37626.269	0	0	0	9314.201	6.753	0	0	0	0	0	0.727
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligible area (ha.)	0	0	0	0	0	0	0	0.00	0	0	0	0	0	0.000
	(iv) No. of S&M farmers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Input Subsidy to farmers other than Small & Marginal Farmers														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligible area (ha.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	(iv) No. of S&M farmers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Assistance to small and marginal sericulture farmers														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total area (ha.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of S&M farmers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Employment Generation														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of man days generated	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) Quantum of food grains distributed as part of wage component	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Animal Husbandry Assistance to small and marginal farmers/agricultural labourers														
(i)	Replacement of draught/milch animals or animals used for haulage														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	67.102	0	0	0	0	0	0	0	82.682
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(ii)	Provisions of fodder/feed in cattle camps														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of cattle camps	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) Number of cattle kept in camps	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(v) Qty. of fodder(qtls.) supplied in camp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(iii)	Water supply in Cattle Camps														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of Tanker load	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of cattle camps and cattle kept therein	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(iv)	Additional cost of medicines and vaccine (calamity related requirements)														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(v)	Supply of fodder outside Cattle Camps														

	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	148.290	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total qty. of fodder transported (Qtls)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(vi)	Movement of useful cattle to other areas														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of cattle moved	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Assistance to Fishermen														
(a)	For repair/replacement of boats, nets (damaged or lost)														
	(i) As per SDRF/NDRF norms	0	0	2.929	0	0	0	0	0	0	0	0	0	0	0.296
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b)	Input Subsidy for fish seed farm														
	(i) As per SDRF/NDRF norms	0	0	27.366	0	0	0	0	0	0	0	0	0	0	51.922
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligible area (ha.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of fish farmers	0	0	0	0	0	0	0	0	0	0	0	0	0	0

9	Assistance to artisans in handicrafts/handloom sectors by way of subsidy for repair/replacement of damaged equipments														
(a)	Traditional Crafts (Handicraft)														
(i)	For replacement of damaged tools / equipments														
	(i) As per SDRF/NDRF norms	0	0	411.804	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of equipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(ii)	For loss of raw materials / goods in process/ finished goods														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Qty. of materials (Qtls.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b)	For Handloom Weavers														
(i)	Repairs/replacement of loom equipments and accessories														
	(i) As per SDRF/NDRF norms	0	0	1.968	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of equipments/ accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	(iv) No. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(ii)	Purchase of yam and other materials like dyes and chemicals and finished stocks														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Qty. of materials (Qtls.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Assistance for repair/ restoration of damaged houses														
(a)	Fully damaged/ destroyed Pucca houses														
	(i) As per SDRF/NDRF norms	0	0	207.318	0	0	191.151	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	218	0	0	201	0	0	0	0	0	0	0	0
(b)	Fully damaged/ destroyed Kutcha houses														
	(i) As per SDRF/NDRF norms	0	0	406.077	0	0	194.004	395.616	0	0	0	0	0	0	272.937
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	427	0	0	204	416	0	0	0	0	0	0	287
(c)	Severely damaged houses														
(i)	Severely damaged Pucca houses														

	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(ii)	Severely damaged Kutcha houses														
	(i) As per SDRF/NDRF norms	0	0	178.325	0	0	0	0	0	0	0	0	0	0	82.539
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	
	(iii) Number	0	0	175	0	0	0	0	0	0	0	0	0	0	81
(d)	Partially damaged houses (both pucca and kutcha)														
	(i) As per SDRF/NDRF norms	0	0	20.132	0	0	29.872	16.256	0	0	0	0	0	0	54.449
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	556	0	0	316	508	0	0	0	0	0	0	1047
(e)	Huts damaged/ destroyed														
	(i) As per SDRF/NDRF norms	0	0	18.385	0	0	23.301	76.043	0	0	0	0	0	0	4.086
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	669	0	0	1214	2029	0	0	0	0	0	0	32
11	Provision of emergency supply of drinking water in rural areas and urban areas														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total Qty. of water supplied (No. of Tankers load)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	(i) Provisions of medicines, disinfectants, insecticides for prevention of outbreak of epidemics	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) No. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	(i) Medical care for cattle and poultry against epidemics as a sequel to a notified natural calamity	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Total No. of cattle & poultry benefited	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	(i) Evacuation of people affected/ likely to be affected	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) No. of people evacuated	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Average cost/person	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Hiring of boats for carrying immediate relief and saving life														
	(i) No. of boat days	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Average hiring cost per boat/day	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Provisions for temporary accommodation, food, clothing, medical care etc. of people affected/ evacuated (operation of relief camps)														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	600.00	2766.21	0	0	0	0	0	0	0

	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of persons provided shelters	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of relief camps opened	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(v) Average cost per person/per day	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Air dropping of essential supplies														
	(i) No. of sorties	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Quantity (in MTs) dropped	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Repair/restoration of immediate nature of the damaged infrastructure in eligible sectors														
(a)	Roads & Bridges														
	(i) As per SDRF/NDRF norms	0	0	5551.259	0	0	0	2860.221	0	0	0	0	0	0	1.760
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Cumulative length of roads repaired (in KMs)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(b)	Drinking water supply														
	(i) As per SDRF/NDRF norms	0	0	880.787	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of schemes	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(c)	Irrigation														
	(i) As per SDRF/NDRF norms	0	0	3060.758	0	0	0	249.201	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of schemes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(d)	Power supply (only limited to immediate restoration of electricity supply in the affected areas)														
	(i) As per SDRF/NDRF norms	0	0	14064.220	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(e)	Primary Education														
	(i) As per SDRF/NDRF norms	0	0	4773.591	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of primary school buildings repaired	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(f)	Primary Health Centre														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of Primary Health Centres buildings repaired	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(g)	Community assets owned by Panchayats														
	(i) As per SDRF/NDRF norms	0	0	26120.520	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of community assets repaired	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Replacement of damaged medical equipments and lost medicines of Govt.Hospitals/ Health centres	0	0	0	0	0	0	0	0	0	0	0	0	69946.787	0
20	Operational cost (of POL only) for Ambulance Service, Mobile Medical Teams and Temporary Dispensaries														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Cost of clearance of debris														
	(i) As per SDRF/NDRF norms	0	0	234.974	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Draining off flood water in affected areas	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Cost of search and rescue measures														
	(i) As per SDRF/NDRF norms	0	0	865.476	0	0	0	0	0	0	0	0	0	0	0

	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Disposal of dead bodies/ carcasses														
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of dead bodies disposed	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) Total no. of carcasses disposed	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Training to specialist multi-disciplinary groups/ teams of the State personnel drawn from different cadres/ services/ personnel involved in management of disaster in the State														
	(i) No. of training organized	0	0	2000.00	0	0	3258.673	1823.581	0	0	0	0	0	167.250	0
	(ii) No. of persons trained	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Procurement of essential Search, Rescue and Evacuation equipments including Communication equipments														
	Cost of equipments procured	0	0	0	0	0	903.588	350.000	0	0	0	0	0	0	0
	TOTAL	0.000	0.000	99425.968	0.000	0.000	6090.898	19980.802	8.631	8.127	0.000	0.000	0.000	83655.637	12189.735
