



Government of Odisha

**ANNUAL REPORT
ON
NATURAL CALAMITIES
2012-13**

**Revenue & Disaster Management Department
Special Relief Commissioner**

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Chapter-I

Introduction

Odisha is vulnerable to multiple natural hazards. Due to its sub-tropical littoral location, the state is prone to tropical cyclones, storm surges and tsunamis. It has a 480 km coastline. There are eleven major river systems in Odisha such as the Subarnarekha, the Budhabalanga & Jambhira, the Baitarani, the Brahmani, the Mahanadi, the Rusikulya, the Vansadhara, the Nagabali, the Indravati, the Kolab, and the Bahuda. Its densely populated coastal plains are the alluvial deposits of its river systems. The rivers in these areas with heavy load of silt have very little carrying capacity, resulting in frequent floods, only to be compounded by breached embankments. About two-third of the total cultivated area being rain-dependent, drought poses a serious threat at regular intervals due to failure of Monsoon. Though a large part of the state comes under Earthquake Risk Zone-II (Low Damage Risk Zone), the Brahmani-Mahanadi graven and their deltaic areas come under Earthquake Risk Zone-III (Moderate Damage Risk Zone) covering 43 out of the 103 urban local bodies of the state. Apart from these, loss of life due to lightning has remained the highest of all natural calamities over the last decade. Heat-wave conditions during summer months also lead to heat-stroke death and other suffering to the people. Fire accident is common in the State which occurs round the year.

The table below indicates the incidence of major disasters in the State during last 20 years.

Year	Calamity	Districts Affected
1993	Floods	27
1994	Floods Drought	5 10
1995	Floods & Cyclone	23
1996	Drought	28
1997	Drought	16
1998	Drought, Heat wave	26
1999	Super Cyclone	14
2000	Drought	29
2001	Floods	24
2002	Drought	29

2003	Floods	23
2004	Floods	05
2005	Floods	15
2006	Floods	27
2007	Floods (July)	12
2007	Floods (Aug & Sept)	15
2008	Floods(June & September)	21
2009	Flood & Heavy rain	17
	Drought / Pest Attack	18
2010	Flood & Heavy rain	06
	Drought	17
	Unseasonal Cyclonic Rain	24
2011	Drought	21
	Flood	21
2012	Drought	4
	Flood	5

During the year 2012-13, in addition to heavy rain, flood and drought, other disasters like fire accidents, lightning, hailstorm and heat wave were experienced in the State.

Chapter- II

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	18	Keonjhar	1487.7
2	Balasore	1592.0	19	Khordha	1408.4
3	Bargarh	1367.3	20	Koraput	1567.2
4	Bhadrak	1427.9	21	Malkanagiri	1667.6
5	Bolangir	1289.8	22	Mayurbhanj	1600.6
6	Boudh	1623.1	23	Nawarangpur	1569.5
7	Cuttack	1424.3	24	Nayagarh	1354.3
8	Deogarh	1582.5	25	Nuapara	1286.4
9	Dhenkanal	1428.8	26	Puri	1408.8
10	Gajapati	1403.3	27	Rayagada	1285.9
11	Ganjam	1276.2	28	Sambalpur	1495.7
12	Jagatsinghpur	1514.6	29	Sonepur	1418.5
13	Jajpur	1559.9	30	Sundargarh	1422.4
14	Jharsuguda	1362.8		State Average	1451.2
15	Kalahandi	1330.5			
16	Kandhamal	1427.9			
17	Kendrapara	1556.0			

District-wise rainfall for the year 2012

The district-wise monthly rainfall from January to December 2012 with percentage of deviation is given in the table below.

Sl. No.	DISTRICT	JAN.			FEB.			MAR.			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	97.7	12.6	675.2	12.2	27.1	-55.1	0.0	24.3	-100.0	2.4	27.2	-91.0	15.0	52.9	-71.6	149.3	225.1	-33.7	346.1	347.7	-0.5
2	Balasore	71.1	14.7	383.6	0.0	31.8	-100.0	0.0	34.4	-100.0	80.0	62.2	28.7	29.9	108.5	-72.4	97.3	221.5	-56.1	146.8	308.6	-52.4
3	Bargarh	59.5	12.5	376.0	0.0	19.1	-100.0	0.0	22.0	-100.0	4.4	20.0	-77.9	1.7	25.6	-93.5	321.8	205.6	56.5	275.5	397.2	-30.6
4	Bhadrak	65.7	11.8	456.9	2.1	29.6	-92.8	0.0	36.1	-100.0	36.3	51.2	-29.1	25.6	91.4	-72.0	115.2	198.2	-41.9	211.4	293.6	-28.0
5	Bolangir	22.2	8.6	158.6	2.1	13.2	-83.8	1.0	14.6	-93.2	10.3	13.4	-23.2	5.3	27.8	-81.1	247.9	202.8	22.3	274.1	360.5	-24.0
6	Boudh	0.0	17.0	-100.0	0.0	26.8	-100.0	0.0	22.4	-100.0	0.0	16.5	-100.0	0.0	38.4	-100.0	167.1	233.8	-28.5	325.7	418.5	-22.2
7	Cuttack	76.2	9.9	669.2	0.0	28.6	-100.0	0.0	24.7	-100.0	24.5	28.3	-13.6	23.8	71.5	-66.8	149.7	210.0	-28.7	446.1	308.3	44.7
8	Deogarh	120.8	14.1	756.5	2.6	27.0	-90.2	0.0	20.6	-100.0	18.8	21.3	-11.9	6.4	41.9	-84.8	128.0	242.4	-47.2	280.9	447.7	-37.2
9	Dhenkanal	123.3	10.5	1073.8	0.0	21.9	-100.0	0.0	33.7	-100.0	17.4	41.3	-57.9	37.9	69.6	-45.6	155.5	225.7	-31.1	337.9	317.9	6.3
10	Gajapati	26.7	8.1	229.9	0.0	23.0	-100.0	3.3	41.3	-92.0	100.7	65.2	54.5	81.9	107.8	-24.0	163.1	199.7	-18.3	243.9	230.6	5.8
11	Ganjam	29.3	9.4	211.8	0.0	24.1	-100.0	0.0	32.6	-100.0	37.7	36.6	3.0	28.2	65.4	-56.8	97.3	168.3	-42.2	273.6	220.8	23.9
12	Jagatsinghpur	18.3	14.5	25.9	0.0	21.7	-100.0	2.5	35.5	-93.0	19.1	25.4	-24.7	25.1	78.0	-67.8	108.4	202.3	-46.4	312.4	277.3	12.6
13	Jajpur	102.7	12.9	695.7	0.0	25.1	-100.0	0.0	28.4	-100.0	45.8	46.1	-0.7	71.0	93.7	-24.2	123.2	238.5	-48.3	381.4	350.9	8.7
14	Jharsuguda	38.6	14.1	173.8	0.0	22.9	-100.0	0.0	17.6	-100.0	38.6	15.1	155.4	5.1	27.9	-81.9	168.1	218.8	-23.2	421.1	385.8	9.1
15	Kalahandi	17.8	10.3	72.5	0.0	14.4	-100.0	1.1	23.7	-95.5	27.6	25.7	7.5	11.5	41.8	-72.6	210.8	240.4	-12.3	382.6	327.7	16.8
16	Kandhamal	50.1	10.6	372.9	11.9	29.7	-59.9	0.0	28.0	-100.0	41.4	35.7	15.9	28.8	67.8	-57.5	210.1	207.9	1.0	312.7	325.1	-3.8
17	Kendrapara	0.0	10.6	-100.0	0.0	30.2	-100.0	0.0	35.0	-100.0	13.9	33.9	-59.0	38.8	94.2	-58.8	90.2	208.3	-56.7	309.3	317.1	-2.5
18	Keonjhar	89.6	14.6	513.7	5.2	33.8	-84.5	0.0	33.1	-100.0	45.4	42.1	7.8	22.6	94.8	-76.2	152.6	241.4	-36.8	213.1	318.0	-33.0
19	Khordha	58.1	12.4	368.5	0.0	24.3	-100.0	0.0	22.1	-100.0	34.6	28.0	23.4	28.6	60.7	-52.9	123.8	196.2	-36.9	377.4	304.9	23.8
20	Koraput	10.7	5.7	88.1	0.0	8.6	-100.0	5.0	18.3	-72.9	48.6	55.2	-12.0	16.2	81.9	-80.2	128.0	206.8	-38.1	347.1	375.6	-7.6
21	Malkangiri	4.4	2.7	61.4	0.0	4.1	-100.0	0.1	8.9	-99.2	10.3	34.8	-70.4	0.0	49.1	-100.0	157.5	212.2	-25.8	533.7	465.7	14.6
22	Mayurbhanj	69.1	10.3	570.5	21.0	28.0	-25.1	0.0	40.2	-100.0	64.6	52.5	23.1	45.7	101.2	-54.9	183.1	265.8	-31.1	253.3	337.3	-24.9
23	Nawarangpur	24.1	6.7	259.7	0.0	14.1	-100.0	0.0	15.1	-100.0	54.5	34.1	59.7	14.0	66.1	-78.8	202.3	251.8	-19.7	426.0	356.6	19.5
24	Nayagarh	105.3	11.7	800.1	0.0	28.6	-100.0	0.0	30.0	-100.0	49.1	39.9	22.9	22.6	58.8	-61.5	153.9	203.5	-24.4	438.6	288.5	52.0
25	Nuapara	17.0	12.0	41.7	0.0	14.6	-100.0	0.0	19.7	-100.0	8.5	21.8	-61.2	4.8	31.2	-84.6	99.3	210.3	-52.8	293.3	347.1	-15.5
26	Puri	0.0	10.9	-100.0	0.0	25.4	-100.0	0.0	15.5	-100.0	0.0	18.5	-100.0	0.0	62.1	-100.0	117.9	188.0	-37.3	305.3	292.0	4.5
27	Rayagada	46.1	9.6	380.1	0.5	22.9	-97.6	6.2	38.0	-83.6	78.6	52.7	49.2	54.9	87.8	-37.4	151.5	195.3	-22.4	216.2	259.5	-16.7
28	Sambalpur	87.8	14.8	492.9	5.8	24.5	-76.5	0.0	18.2	-100.0	0.0	16.5	-100.0	0.0	32.3	-100.0	235.1	221.0	6.4	423.0	429.5	-1.5
29	Sonepur	46.3	12.5	270.7	0.0	17.2	-100.0	0.0	15.7	-100.0	22.2	15.4	43.9	0.0	29.3	-100.0	244.7	217.4	12.5	325.8	399.6	-18.5
30	Sundargarh	54.3	15.1	259.5	14.3	24.9	-42.5	0.0	16.0	-100.0	3.9	16.0	-75.4	3.5	40.6	-91.5	176.6	237.4	-25.6	303.8	386.4	-21.4
	Total	1532.5			77.8			19.1			939.0			648.8			4829.5			9738.0		
	State Average	51.1	11.4	348.1	2.6	22.9	-88.7	0.6	25.5	-97.5	31.3	33.1	-5.4	21.6	63.3	-65.8	161.0	216.5	-25.6	324.6	339.9	-4.5

Contd..

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	Antc. Normal	% of Dev
1	Angul	418.5	357.5	17.0	239.8	217.5	10.3	68.9	86.3	-20.2	59.8	20.4	193.0	0.0	3.3	-100.0	1409.7	1398.6	0.8
2	Balasore	290.8	332.1	-12.4	233.3	267.6	-12.8	27.9	170.5	-83.7	33.3	34.6	-3.9	18.4	5.5	234.8	1010.4	1586.5	-36.3
3	Bargarh	487.2	374.4	30.1	254.4	222.6	14.3	80.9	52.8	53.3	9.8	10.4	-5.4	0.0	5.1	-100.0	1495.3	1362.2	9.8
4	Bhadrak	241.8	311.7	-22.4	139.2	216.8	-35.8	39.2	145.3	-73.0	70.9	37.3	90.1	18.4	4.9	276.1	947.5	1423.0	-33.4
5	Bolangir	379.5	333.6	13.8	258.1	237.4	8.7	58.8	68.4	-14.1	8.5	7.2	18.2	0.0	2.3	-100.0	1267.9	1287.5	-1.5
6	Boudh	468.3	488.8	-4.2	153.4	244.8	-37.4	78.7	90.5	-13.1	25.7	21.1	21.6	0.0	4.4	-100.0	1218.8	1618.6	-24.7
7	Cuttack	442.1	339.1	30.4	207.5	229.2	-9.5	110.9	125.6	-11.7	156.9	45.0	248.7	0.0	4.1	-100.0	1637.5	1420.2	15.3
8	Deogarh	474.2	443.4	6.9	235.1	228.2	3.0	96.3	84.4	14.1	24.3	8.0	203.3	1.4	3.5	-59.0	1387.3	1579.0	-12.1
9	Dhenkanal	420.6	344.8	22.0	229.7	220.6	4.1	76.1	104.4	-27.1	79.2	36.2	118.8	0.0	2.2	-100.0	1477.5	1426.6	3.6
10	Gajapati	199.0	253.6	-21.5	267.2	237.9	12.3	75.0	168.6	-55.5	134.0	61.8	116.8	0.0	5.7	-100.0	1294.9	1397.6	-7.3
11	Ganjam	216.6	246.8	-12.2	191.3	216.3	-11.6	81.7	177.7	-54.0	268.8	71.1	278.1	0.0	7.1	-100.0	1224.4	1269.1	-3.5
12	Jagatsinghpur	241.0	379.1	-36.4	215.3	241.4	-10.8	54.0	151.1	-64.3	98.5	80.4	22.5	8.4	7.9	6.0	1094.5	1506.7	-27.4
13	Jajpur	312.1	341.2	-8.5	179.3	238.0	-24.7	84.8	140.2	-39.5	74.0	41.0	80.5	5.7	3.9	46.2	1374.2	1556.0	-11.7
14	Jharsuguda	803.7	382.9	109.9	220.1	210.7	4.5	50.5	54.9	-8.1	48.3	7.7	526.8	5.4	4.4	23.6	1794.0	1358.4	32.1
15	Kalahandi	451.2	355.4	27.0	268.2	204.6	31.1	29.8	74.0	-59.7	23.5	10.9	115.9	0.0	1.6	-100.0	1424.2	1328.9	7.2
16	Kandhamal	447.8	330.8	35.4	257.2	239.1	7.6	78.4	117.7	-33.4	68.4	31.0	120.7	0.0	4.5	-100.0	1506.8	1423.4	5.9
17	Kendrapara	223.7	333.3	-32.9	171.1	237.3	-27.9	65.6	183.7	-64.3	164.7	67.2	145.0	6.9	5.2	33.5	1077.2	1550.8	-30.5
18	Keonjhar	383.3	343.6	11.5	234.0	241.1	-3.0	58.1	101.3	-42.7	47.8	20.5	133.4	4.0	3.4	19.0	1251.6	1484.3	-15.7
19	Khordha	327.9	320.6	2.3	178.4	234.5	-23.9	93.0	149.3	-37.7	151.0	50.4	199.6	0.0	5.0	-100.0	1372.7	1403.4	-2.2
20	Koraput	529.6	393.6	34.6	282.9	256.3	10.4	48.3	126.1	-61.7	89.4	32.6	174.3	0.0	6.5	-100.0	1505.8	1560.7	-3.5
21	Malkanagiri	537.3	472.8	13.6	372.5	281.2	32.5	56.6	109.5	-48.3	46.0	23.6	94.9	0.0	3.0	-100.0	1718.4	1664.6	3.2
22	Mayurbhanj	300.0	359.9	-16.7	249.1	262.0	-4.9	57.1	114.1	-50.0	20.6	21.6	-4.7	19.9	7.3	173.1	1263.4	1592.9	-20.7
23	Nawarangpur	445.8	407.5	9.4	409.4	225.6	81.5	49.0	168.6	-70.9	60.5	18.7	223.5	0.0	4.6	-100.0	1685.6	1564.9	7.7
24	Nayagarh	466.4	288.2	61.8	270.7	226.8	19.4	121.7	134.5	-9.5	119.3	39.0	206.0	1.4	4.8	-71.4	1747.7	1349.5	29.5
25	Nuapara	249.6	327.8	-23.9	176.9	214.5	-17.5	48.9	68.9	-29.0	31.8	15.3	107.6	0.0	3.2	-100.0	930.2	1283.2	-27.5
26	Puri	322.4	297.9	8.2	217.1	243.2	-10.7	103.8	181.6	-42.8	192.4	67.3	185.9	0.0	6.4	-100.0	1258.9	1402.4	-10.2
27	Rayagada	330.5	273.7	20.8	200.1	199.1	0.5	82.0	109.7	-25.2	119.9	32.9	264.4	0.0	4.7	-100.0	1286.5	1281.2	0.4
28	Sambalpur	739.5	442.4	67.2	247.7	224.7	10.3	91.4	54.7	67.1	46.9	12.7	269.0	1.1	4.4	-74.2	1877.2	1491.3	25.9
29	Sonepur	440.0	408.9	7.6	206.8	228.0	-9.3	100.8	59.8	68.6	16.2	11.4	41.8	0.0	3.3	-100.0	1402.8	1415.2	-0.9
30	Sundargarh	562.6	393.9	42.8	248.2	211.5	17.4	40.6	67.7	-40.1	28.9	8.7	232.0	4.9	4.2	16.8	1436.7	1418.2	1.3
	Total	12152.8			7014.0			2108.7			2319.1			96.1			41379.4		
	State Average	405.1	356.0	13.8	233.8	231.9	0.8	70.3	114.7	-38.7	77.3	31.5	145.4	3.2	4.5	-28.8	1379.3	1446.7	-4.7

Rainfall during Monsoon 2012 (1st June to 30th September)

The State experienced average deficient rainfall of 25.6 percent in June, 4.5 percent in July, surplus rainfall of 13.8 percent in August and 0.8 percent in September, 2012 compared to the long term average rainfall. The cumulative average rainfall of the State from June to September 2012 accounts for deficit of 1.7 percent.

Month	Normal	Rainfall in MM	
		Actual	Deficiency in %
June	216.5	161.0	-25.6
July	339.9	324.6	-4.5
August	356.0	405.1	13.8
September	231.9	233.8	0.8

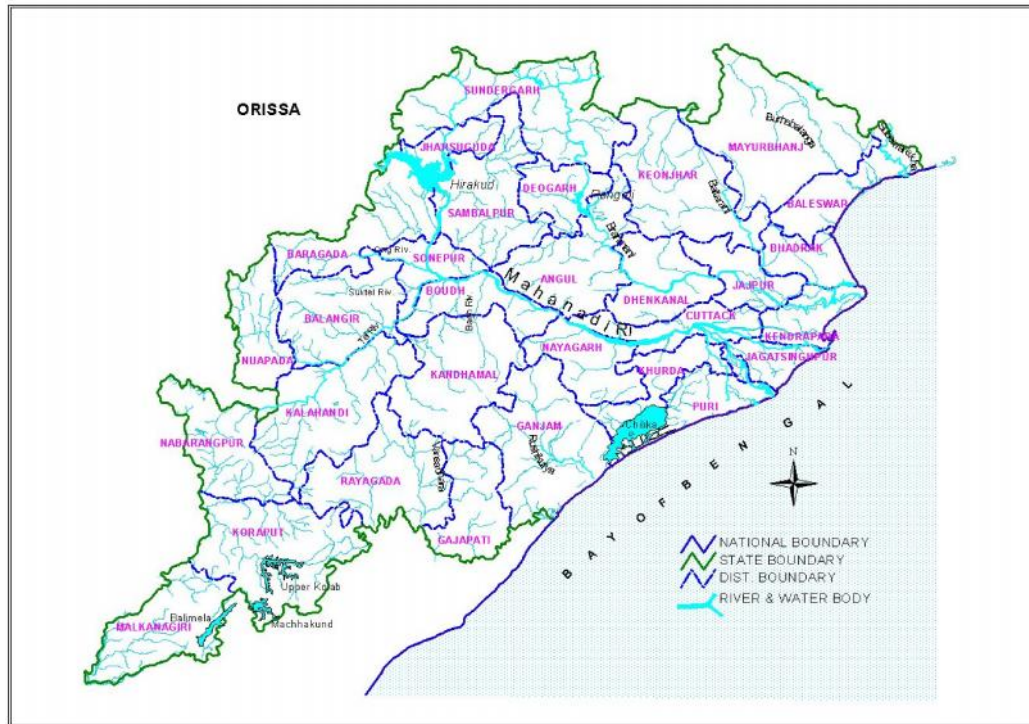
Block-wise analysis of the cumulative rainfall from 1st June to 30th September 2012 indicates that out of 314 Blocks in the State, 61 Blocks received surplus rainfall to the extent of 19% & more. 157 Blocks received rainfall of between surplus 19% to less than 19% which is considered as normal, 65 Blocks received rainfall of less than 19% to 39%, 28 Blocks received rainfall less than 39% to 59% and 3 Blocks received rainfall less than 59% of the long-term average rainfall. Table below indicates district-wise position.

SI. No.	DISTRICT	No. of Blocks having deviation of 19% & above) : EXCESS	No. of Blocks having deviation of +19% to -19%) : NORMAL	No. of Blocks having deviation of -19% to -39%) : DEFICIT	No. of Blocks having deviation of -39% to -59%) : SEVERE DEFICIT	No. of Blocks having deviation of -59% & above) : SCANTY
1	Angul		8			
2	Balasore		3	3	6	
3	Bargarh	4	7	1		
4	Bhadrak			6	1	
5	Bolangir	3	7	3	1	
6	Boudh		2	1		
7	Cuttack	3	8		2	
8	Deogarh		2	1		
9	Dhenkanal	2	5	1		
10	Gajapati	1	5	2		
11	Ganjam	2	11	7	1	1
12	Jagatsinghpur		3	4	1	

13	Jajpur		5	5		
14	Jharsuguda	4	1			
15	Kalahandi	4	7		2	
16	Kandhamal	3	7	2		
17	Kendrapara		3	4	1	1
18	Keonjhar	2	4	5	2	
19	Khordha	2	5	3		
20	Koraput	5	5	1	2	1
21	Malkanagiri	2	5			
22	Mayurbhanj	1	10	10	5	
23	Nawarangpur	5	5			
24	Nayagarh	4	4			
25	Nuapara		3	1	1	
26	Puri	4	4	1	2	
27	Rayagada	3	6	1	1	
28	Sambalpur	6	3			
29	Sonepur		5	1		
30	Sundargarh	1	14	2		
State		61	157	65	28	3
		<i>No. of Disrict.-20</i>	<i>No. of Disrict.-29</i>	<i>No. of Disrict.-22</i>	<i>No. of Disrict.-14</i>	<i>No. of Disrict.-3</i>

CHAPTER – III

Floods & Heavy Rain



Preparedness:

1. District level Natural Calamity Committee meeting:
 - Held in all 30 districts
2. Preparedness meeting at State level:
 - Emergency officers meeting and orientation on 9th -10th May 2012
 - Meeting with Line Departments on 2nd June 2012
3. Breach closing:
 - All 234 breaches occurred during flood'2011 have been closed.
4. Vulnerable Points on embankments identified:
 - Total-337
 - Critical-25
5. Flood fighting materials prepositioned:
 - Gunny bags-38,39,500
 - Sand-93,035 Cum
 - Bamboo-11,800

- Bullah-39,770
- Bamboo Mat-23,410

6. Availability of boats:

- 202 boats available under State Port Engineering Organisation.
- 110 boats available with ODRAF.
- 70 boats available with NDRF; more boats will be brought from other units if required.
- 120 boats in fire service units at Districts to be deployed in the event of flood.
- 25 boats positioned at Fire Service Training Center at Bhubaneswar.
- Total Boats-527
- Enumeration & deployment plan of privately owned boats prepared by the districts.

7. Health Measures :

- H & FW Department had taken steps for storing of essential medicines for flood related diseases such as halogen tablets, Anti-venom serum, medicines for Diarrhoea, ORS tablets, Halogen tablets at all hospitals at different levels.
- Mobile health teams formed.

8. Veterinary Measures:

- F&ARD Dept had taken steps for storing of livestock medicines with all CDVOs.
- The Department was instructed to finalise the procurement process for supply of cattle feed for the cattle in flood affected areas.

9. Agriculture measures :

- Agriculture Department was ready with the Kharif Contingency plan for 2012.

10. Arrangement for Restoration of roads, power & other public utilities:

- Departments H&UD, Works, RD & Energy and BSNL had made necessary prior arrangements for immediate restoration of public utilities like road, water supply projects, electricity supply, telephone lines in case of damage due to flood.
- Coordination meeting was held with related departments for ensuring pre-flood arrangements of the respective departments.

11. Readiness of emergency equipment at cyclone/flood shelters –

Mock drill on disaster management held on 6th June and 19th June, 2012 in all Blocks / Cyclone Shelters to ascertain the readiness of the community to meet any eventuality. The line department officers took part in the said drill in coordination with

the Collectors concerned. Steps were taken for cleaning and keeping the premises of all cyclone/ flood shelters in habitable condition.

12. Other preparedness activities: -

- Activating Control Rooms: State & District Emergency Operation Centres, Flood Control room in the office of EIC, WR, Control Rooms in other line departments including their District level offices activated.
- Weather Warnings & Flood Forecasting Dissemination: Daily Weather Bulletin issued by IMD daily during monsoon period. CWC & DoWR to give flood forecasts.
- Installation of temporary Police VHF: 14 temporary Police VHF stations were installed by the Supt. of Police (Signal), Cuttack in interior areas and one in the State Emergency Operation Centre.
- Arrangement & Stocking of essential commodities: Arrangements were by the Food Supplies & Consumer Welfare Department for stocking of PDS commodities 2/3 months in advance in interior pockets so that these are available in these areas during the rainy season. The Civil Supplies Officers were instructed to keep constant liaison with sources of supply of other relief materials like chuda, gud, etc. Temporary shelter materials in sufficient quantity has been stored at State, District and Tahasil levels.
- Arrangement & planning for supply of safe drinking water: H&UD Dept. has drawn contingency plan for supply of safe drinking water during floods and to proposition adequate stock of bleaching power, halogen tablets in all divisions.
- Restriction on plying of vehicles on submerged roads/ bridges: Instructions have been issued to close the bridges/ roads overtopping with flood/ rain water by constructing temporary barricades on both sides & erect hoardings. The respective authorities in charge of the concerned roads will be responsible for the same. Instructions have been issued also to take steps for cancellation of the driving license of the errant drivers.
- Readiness of ODRAF, Fire Service units and liaison with NDRAF: 10 ODRAF units located at Cuttack, Chatrapur, Koraput, Jharsuguda, Balasore, Bhubaneswar, Paradip, Bolangir, Mayurbhanj and Rourkela were in readiness with required of emergency equipment. 100 fire service units have been provided with boats and other required equipment for flood rescue & relief operation. Close liaison with NDRF is being maintained. ODRAF, NDRF, Fire Service units participated in the mock drill held on 6th June 2012 and 19th June 2014.

Occurrence of flood:

Due to heavy rain during August, flash floods were experienced in Khordha, Kandhamal, Nayagarh and Kalahandi Districts. Similarly due to heavy rain on the effect of Cyclone "Neelam" during 1st week of November, flash flood was experienced in Ganjam District.

0.61 lakh population in 1059 Villages of 376 GPs under 33 Blocks and 115 wards of 18 ULBs were affected by flash floods. 3 persons lost their lives due to flood. 13307 houses were damaged. About 1061.82 hectares of crop area was sand cast. There was damage to Rural Roads, PWD Roads and river embankments. The total loss to public properties comes to Rs.21386.37 lakh.

Relief Operation:

ODRAF teams with power boats and emergency equipments were deployed in Nayagarh & Khordha Districts for search and rescue operation.

22 free kitchen centres were opened and 8430 persons were provided with cooked foods. Emergent relief was provided for a period of 3 days to the affected people of the Khordha and Nayagarh Districts. 988.41 Qtl. of rice, 277.49 Qtl. of Chuda (flattened rice), 23.14 Qtl. of Guda (Juggery) were distributed to the affected people. In addition to that polythene and garments were also distributed.

HBA assistance to the extent of Rs.274.50 lakh, sand cast subsidy of Rs.89.44 lakh, ex-gratia assistance (loss of life) of Rs.3.00 lakh in shape of account payee cheques were distributed to the affected persons. Rs.50.20 lakh was spent for providing food assistance.

An amount of Rs.1.77 crore for repair/restoration of rural roads and Rs.4.75 crore for repair/restoration of river embankments was allocated out of SDRF for the purpose.

The State Govt. tackled the flood situation effectively.

Chapter- IV

Drought

Drought 2012

South West Monsoon generally breaks in Odisha by 10th June. This year there was prolonged summer and the monsoon broke on 17th June in a part of the State and covered the entire State on 19th June. The rainfall during June remained deficient by 26.1 percent. In July also Odisha did not get adequate rainfall in the first fortnight. The shortage of rainfall in July up to 15th was 18.7 percent. Cumulatively the shortage of rainfall for the month of June and first fortnight of July remained 22.8 percent. During this period there was deficit / severe deficit of rainfall in 21 districts. Block wise analysis of rainfall data indicates that 25 Blocks had rainfall deficit of more than 59 per cent, 63 Blocks had deficit between 40 and 59 per cent and 83 Blocks got deficit rainfall between 20 and 39 percent. Thus, rainfall remained deficit of more than 19 per cent in 171 Blocks of total 314 Blocks in Odisha up to 16th of July 2012.

Although there was slight improvement in rainfall during the second fortnight of July, rainfall as on 31st July 2012 in 128 Blocks remained deficient by more than 19 per cent. Of them rainfall in 13 Blocks had deficit of more than 59 per cent, in 43 Blocks the deficit was between 40 to 59 per cent and remaining 72 Blocks had rainfall deficit between 20 to 39 per cent. In all, 128 Blocks in 27 districts faced rainfall deficit of more than 19 per cent from 1st June to 31st July 2012.

Due to late arrival of Monsoon and scanty as well as erratic rainfall, the agriculture operations especially in rainfed areas were severely affected.

Declaration of Drought

On the basis of the reports of crop cutting experiment received from the Collectors, the State Government have declared 314 villages of 59 Grampanchayats under 10 Blocks of 4 Districts as drought affected having sustained crop loss of 50% and above pertaining to Kharif 2012.

**Abstract of villages having crop loss of 50% and above
due to drought during kharif-2012**

SI	District	No of Blocks affected	No of GPs containing the affected villages	No of villages affected
1	Balasore	6	49	278
2	Bhadrak	1	3	4
3	Mayurbhanj	1	3	8
4	Nuapada	2	4	24
TOTAL		10	59	314

Relief Measures:

The following relief measures were taken to assist the affected farmers:

1. Agriculture input subsidy to the farmers (Actual Cultivators) who have sustained crop loss of 50% and above.
2. Conversion of Kharif short term loans of the farmers to medium term loans in drought affected areas. The rate of interest of short term loans to apply to converted medium term loans.
3. Remission of 50% cess on land revenue of the farmers where the crop loss was 50% or more. Collection of the remaining amount to be deferred to the next financial year without levy of interest.
4. The tuition fees and examination fees in Government and aided Schools and Colleges in drought affected areas were waived.
5. Food assistance @ 1 kg per adult and 500 gram per child to the people in dire need of immediate sustenance up to 60 days, as per assessment of the Collectors.

Chapter - V

Fire Accident & Lightning

Fire Accident

District-wise loss of life & properties due to fire accidents during the year 2012-13 are given in the table below.

Sl. No.	Name of the District	No. of accident	No. of villages affected	No. of families affected	approximate value of properties lost (in Rs.)	No. of persons died	No. of cattle died
1	2	3	4	5	6	7	8
1	Angul	287	260	597	14531400	0	0
2	Balasore	470	270	470	15833989	0	0
3	Bargarh	33	30	56	4752500	3	0
4	Bhadrak	638	1675		44177000	0	0
5	Bolangir	41	38	70	1543001	1	10
6	Boudh	79	123	348	93970000	0	8
7	Cuttack	510	402	687	35605061	1	0
8	Deogarh	20	13	40	2456000	0	0
9	Dhenkanal	157	150	799	25472400	1	6
10	Gajapati	69	61	155	2453000	0	0
11	Ganjam	456	1429	1739	25004800	3	2
12	Jagatsinghpur	532	347	532	14671500	1	7
13	Jajpur	462	322	472	12965900	0	0
14	Jharsuguda	13	13	13	640000	0	0
15	Kalahandi	9	9	8	244000	1	3
16	Kandhamal	158	103	160	4497400	0	0
17	Kendrapara	659	326	659	26788900	1	8
18	Keonjhar	209	75	209	6822000	0	0
19	Khordha	154	150	399	9089585	0	0
20	Koraput	93	87	231	7402800	2	0
21	Malkanagiri	59	56	59	1560060	0	0
22	Mayurbhanj	318	259	356	9729825	05	13
23	Nawarangpur	107	107	197	3001750	1	0
24	Nayagarh	173	146	408	9805500	0	67
25	Nuapara	7	7	7	1376000	1	0
26	Puri	354	327	521	8261500	2	18
27	Rayagada	46	46	90	1840600	0	17
28	Sambalpur	27	26	51	200800	0	0
29	Subarnapur	97	77	291	10231300	0	0
30	Sundargarh	6	5	6	18000	13	14
Total		6243	6939	9630	394946571	36	173

The affected people were provided with emergent food assistance and house building assistance as per the Norms of SDRF/ NDRF. Ex-gratia assistance was also

sanctioned and paid to the Next of the Kins of those who lost their lives due to the calamity.

Lightning

265 persons lost their lives due to lightning during the year 2012-13. Information on number of deaths occurred due to lightning in different districts are given below.

Sl. No	Name of the District	No. of death
1	Angul	8
2	Balasore	16
3	Bargarh	7
4	Bhadrak	15
5	Bolangir	3
6	Boudh	2
7	Cuttack	16
8	Deogarh	4
9	Dhenkanal	17
10	Gajapati	1
11	Ganjam	16
12	Jagatsinghpur	4
13	Jajpur	16
14	Jharsuguda	4
15	Kalahandi	4
16	Kandhamal	-
17	Kendrapara	12
18	Keonjhar	12
19	Khordha	12
20	Koraput	11
21	Malkanagiri	4
22	Mayurbhanj	32
23	Nawarangpur	9
24	Nayagarh	4
25	Nuapara	1
26	Puri	4
27	Rayagada	4
28	Sambalpur	9
29	Sonepur	1
30	Sundargarh	17
	TOTAL	265

Ex-gratia assistance have been sanctioned and paid to the Next of the Kins of those who lost their lives due to the calamity.

Chapter – VI

Hailstorm

Due to hailstorms, 8 districts were affected during the year 2012-13. The district-wise details of the damages occurred and funds provided towards various assistances for the affected people are given in the table below.

Sl. No.	Districts	Date of Occurrence	No. of House damaged					Assistance (in Rs.)
			Fully	Severely	Partially	Huts	Total	
1	2	3	4	5	6	7	8	9
1	Koraput	14.04.2012			194		194	368600
2	Jajpur	22.04.2012	40	63	138		241	1063000
		21.05.2012	2		1		3	31900
3	Balasore	08.04.2012	6	4	100	13	123	325300
		10.04.2012		113	45	14	172	482100
4	Boudh	30.06.2012		20	16	36		94400
5	Deogarh	23.05.2012	14		147		151	489300
6	Kandhamal	13.04.2012		1	1		2	5100
		12.05.2012			1		1	1900
7	Mayurbhanj	18.05.2012			17		17	32300
8	Subarnapur	03.06.2012		6	12		18	42200
	Total		62	207	1007	63	2957	2936100

Chapter – VII

Heat Wave

Acute heat-wave conditions prevailed in the State in the month of April 2012. The following important preparedness/ preventive measures were undertaken by the State Government:

1. The Collectors were instructed to take required precautionary measures for mitigating the heat-wave situation.
2. Meeting under the chairmanship of Hon'ble Chief Minister was held on 1.3.2012 to review the preparedness activities of the related departments.
3. The Collectors were instructed to hold District level meeting and take necessary measures to tackle the heat-wave situation.
4. Posters on safety tips relating to heat-wave were prepared and distributed by Health & Family Welfare Department and OSDMA for general awareness of the public. Advertisements on such safety tips were also given through local newspapers, radio and television channels.
5. All India Radio, Doordarshan and other Television channels organised discussion and other programmes for creating awareness.
6. Essential medicines, saline and ORS packets were stored in the District Headquarters Hospitals, Community Health Centres and Primary Health Centres. Special arrangements were made and separate beds were earmarked for treatment of heat-stroke patients in different Hospitals.
7. The working hour for the labourers was re-scheduled i.e. from 6 a.m. to 11 a.m. and 3.30 pm to 6 pm. Orders were given to make provision of drinking water at work site.
8. Plying of buses during peak hours i.e. between 11.00 AM to 3.30 PM was regulated. Orders were given to carry portable water and ORS in public transport vehicles.
9. Power distributing companies were instructed to ensure uninterrupted power supply during the summer.
10. The time table of the schools was re-scheduled from 6.30AM to 10.30 AM.

84 persons lost their lives due to heat-stroke related ailments during 2012-13. The district-wise number of human casualties is given below:

Sl.	Name of the District	No. of persons died
1.	Angul	1
2.	Balasore	6
3.	Bargarh	5
4.	Bhadrak	3
5.	Bolangir	1
6.	Boudh	1
7.	Cuttack	2
8.	Dhenkanal	4
9.	Ganjam	9
10.	Jagatsinghapur	3
11.	Jajpur	8
12.	Kalahandi	1
13.	Kendrapara	6
14.	Keonjhar	1
15.	Khurda	1
16.	Mayurbhanj	11
17.	Nuapada	1
18.	Sambalpur	2
19.	Subarnapur	7
20.	Sundargarh	11
Total		84

Ex-gratia assistance @ Rs.10,000/- has been provided to the bereaved families of the sunstroke victims from the Chief Minister Relief Fund by the State Government.

Chapter – VII

State Disaster Response Fund (SDRF)

Expenditure on account of different calamity mitigation measures are met out of SDRF at the State level. As per the procedures and norms prescribed by Govt. of India, the fund is administered by the State Executive Committee headed by the Chief Secretary. The fund is constituted by the sharing of Central Government and State Government at the ratio of 75:25.

When a calamity of rare severity occurs and the response requirements of disasters are beyond the coping capacity of the State, the Government of India sanctions funds out of NDRF for providing immediate relief to the victims.

The position of both SDRF and NDRF is shown below:

FUNDS POSITION 2012-13

(Rs. in crore)

Category of Funds	Opening Balance	Receipt	Total	Expenditure	Balance
SDRF	291.30	431.72	723.02	544.89	178.13
NDRF	0.00	6.19	6.19	0	6.19
Total	291.30	437.91	729.21	544.89	184.32

Chapter – IX

Management Information System

Based on the verdict and observation of Supreme Court derived out of Writ Petition (Civil) No.196/2001, the Management Information System for Tracking Hunger and Malnutrition came into force from 2nd fortnight of January 2003 in the State. It is the prime and foremost duty of State Government to prevent death due to starvation or malnutrition and ensure food security to the needy people. Accordingly, Government of Odisha introduced a suitable policy for regular monitoring of malnutrition and hunger for ensuring Food security etc. with emphasis on following categories.

1. Employment Generation Work
2. Food for Work
3. For vulnerable population
4. In scarcity pockets
5. In epidemic prone areas
6. Of Individual with prolonged illness
7. For Mothers and children with malnutrition
8. Social Security Net

Keeping in view the guidelines and format issued on these aspects, district authorities of the State are submitting required information collecting from grass-root level (G.P. level) twice a month i.e. at the end of each fortnight to Special Relief Commissioner, Odisha. On receipt of the information from the Collectors of the Districts, compilation and analysis work are done at SRC level and evaluation of the data is made as per the prescribed indicators. As monitoring authority, advice and guidance are given to the concerned Departments of Government and all Collectors for making necessary interventions on the feedbacks from the field and submit regular compliance thereof. Thus, Management Information System has proved its utility for effective management of disaster.

Appendix – X
Profile of the State

Sl. No.	Name of the District	Total Land area (Sq.Km.)	Number of Villages	Population (in '000)	Literacy Rate (in per cent)	Cropped area (in '000 ha.)	Inter State rivers	Normal Annual rainfall (mm)
1	2	3	4	5	6	7	8	9
1	Angul	6375	1910	1272	78.96	309.38	Brahmani, Mahanadi	1401.9
2	Balasore	3806	2952	2317	80.66	338.95	Subarnarekha, Budhabalang, Jalaka, Swarna	1592.0
3	Baragarh	5837	1207	1479	75.16	450.39	Mahanadi, Zira, Anga	1367.3
4	Bhadrak	2505	1311	1507	83.25	239.58	Baitarani, Salandi	1427.9
5	Bolangir	6575	1794	1648	65.50	451.78	Hati, Suktel, Rahul	1289.8
6	Boudh	3098	1186	440	72.51	135.70	Mahanadi, Tel, Salanki, Bagh, Mehurni	1623.1
7	Cuttack	3932	1950	2619	84.20	323.37	Mahanadi, Devi, Kathajodi, Birupa, Kuakhai, Sidua, Luna,	1424.3
8	Deogarh	2940	875	312	73.07	101.47	Bramani	1582.5
9	Dhenkanal	4452	1215	1193	79.41	259.75	Bramani, Ramiyal	1428.8
10	Gajapati	4325	1619	576	54.29	148.60	Bansadhara	1403.3
11	Ganjam	8206	3212	3520	71.88	657.28	Rusikulya, Badanadi, Baghua, Dhanei, Loharakhandi, Ghodahada, Kokalaba, Bahuda	1276.2
12	Jagatsinghpur	1668	1288	1137	87.13	177.41	Biluakhai, Paika, Mahanadi, Devi, Hansua.	1514.6
13	Jajpur	2899	1778	1826	80.44	266.56	Baitarani, Brahmani, Budha, Kharasrota, Birupa	1559.9
14	Jharsuguda	2114	348	579	78.36	87.08	Ib, Veden	1362.8
15	Kalahandi	7920	2236	1573	60.22	561.28	Hati, Indravati, Tel, Reta, Vamsadhara, Chandola, Utei.	1330.5

16	Kandhamal	8021	2546	732	65.12	185.03	Rahul, Salunki,	1427.9
17	Kendrapara	2644	1540	1440	85.93	260.03	Brahmani, Hansua, Kharasrota, Luna, Chitrotpala, Paika, Karandia	1556.0
18	Keonjhar	8303	2122	1803	69.00	394.63	Baitarani	1487.7
19	Khurda	2813	1551	2246	87.51	182.26	Kusabhadra, Bhargavi, Daya	1408.4
20	Koraput	8807	2028	1377	49.87	398.94	Kolab, Ultajharan, Champabati, Jhanjabati	1567.2
21	Malkanagiri	5791	1045	613	49.49	219.10	Saberi, Sileru, Guru, Priya Kalam, Taptadhara	1667.6
22	Mayurbhanj	10418	3950	2514	63.98	479.24	Kala, Budhabalang	1600.6
23	Nawaranghpur	5291	901	1219	48.20	281.78	Indravati, Tel, Vaskel	1569.5
24	Nayagarh	3890	1695	962	79.17	209.95	Mahanadi, Brutanga, Kaligiri, Kusumi, Malaguni, Budha Budhari, Kuairia	1354.3
25	Nuapada	3852	663	606	58.20	279.72	Udanti, Jalka	1286.4
26	Puri	3479	1715	1698	85.37	283.26	Kadua, Dhanua, Bhadua, Ratnachira, Malaguni, Devi, Daya, Kusabhadra, Bhargavi, Prachi, Luna	1408.8
27	Rayagada	7073	2667	962	50.88	254.61	Bansadhara, Nagabali	1285.9
28	Sambalpur	6624	1322	1044	76.91	268.61	Mahanadi	1495.7
29	Subarnapur	2337	959	652	74.42	225.36	Mahanadi, Tel	1418.5
30	Sundargarh	9712	1764	2081	74.13	369.98	Brahmani, lb,	1422.4
Total (State)		155707	51349	41947	73.45	8801.08		1451.2

Appendix - XI-A

Extent of damage due to Natural Calamities

State : Odisha

Type of Natural Calamity : Floods 2012

S. No.	Item	Details
1	Period of occurrence	2012
2	Total number of districts in the State	30
3	Number and names of districts affected	5 [Ganjam, Khurda, Kalahandi, Kandhamal, Nayagarh]
4	Number of villages affected	1059
5	Population affected (in lakh)	60581
6	Total land area affected (in lakh ha)	
7.1	Cropped area affected	
7.1.1	Total cropped area affected (in lakh ha)	1061.82
7.1.2	Estimated loss to crops (Rs.in lakh)	
7.1.3	Area where crop damage was more than 50%	
7.2	Percentage of cropped area held by SMF	
7.2.1	In State, as a whole	
7.2.2	In the affected districts	
8	Houses damaged	
8.1	No. of houses damaged (Total)	14655
8.1.1	Fully damaged pucca houses	
8.1.2	Fully damaged Kutcha houses	239
8.1.3	Severally damaged Pucca houses	10
8.1.4	Severally damaged Kutcha houses	1082
8.1.5	Partly damaged houses (Pucca+Kutcha)	12377
8.1.6	No. of huts damaged	363
8.2	Estimated value of damage to houses (Rs. In lakh)	
9	No. of human lives lost	3
10	No. of persons who suffered grievous injuries	
11	No. of persons who suffered minor injuries	
12	Animal & Poultry Loss	
12.1	No. of milch animal lost	23
12.1.1	Buffalo/Cow/Camel/Yak	
12.1.2	Sheep / Goat	
12.1.3	Others (indicate name)	
12.2	No. of Draught animals lost	
12.2.1	Camel /Horse / Bullock	
12.2.2	Calf/Donkey/Pony/Mule	
12.2.3	Others (Indicate name)	

12.3	No. of Poultry birds lost		
13	Damage to public properties		Estimated Loss (Rs.23914.24 lacs)
13.1	Roads (All)	Length- 1171.84 km.	Estimated Loss (Rs. 8417.46 lacs)
13.1.1	State Roads	Length – 532.84 km.	Estimated Loss (Rs. 3208.84 lacs)
13.1.2	District Roads	Length- 186.00 km	Estimated Loss (Rs. 1340.57 lacs)
13.1.3	Village Roads	Length- 453.52 km	Estimated Loss (Rs. 3868.05 lacs)
13.2	Bridges & Culverts	No. - 102	Estimated Loss (Rs. 1644.08 lacs)
13.2.1	Bridges	No. - 1	Estimated Loss (Rs. 1262.48 lacs)
13.2.2	Culverts	No.- 101	Estimated Loss (Rs. 381.6 lacs)
13.3	Drinking Water Supply		
13.4	Irrigation Sector	No. of Schemes - 797	Estimated Loss (Rs. 3791.16 lacs)
13.5	Power Sector	No. of Schemes - 364	Estimated Loss (Rs. 115.8 lacs)
13.6	Education Sector		
13.6.1	Primary Schools (Damaged / Destroyed)		
13.6.2	Middle Schools (Damaged /Destroyed)		
13.6.3	High / Higher Secondary Schools (Damaged /Destroyed)	No. of buildings-10	Estimated Loss (Rs. 2000 lacs)
13.6.4	Other educational institutes (Damaged /Destroyed)		

13.7	Health Sector	No. of buildings - 5	Estimated Loss (Rs. 1500 lacs)
13.7.1	PHCs (Damaged /Destroyed)	No. of buildings - 5	Estimated Loss (Rs. 1500 lacs)
13.7.2	CHCs (Damaged /Destroyed)	No. of buildings-75	Estimated Loss (Rs. 2000 lacs)
13.7.3	Other Buildings (Damaged /Destroyed)		
14.	Total Estimated damage to Houses, crops and Public properties		

* Information is to be given separately for each major natural disaster during the year.

Appendix – XI –B
Extent of Damage due to Natural Calamities*

State: Odisha

Sl. No.	Item	Calamities												Total (All Calamities)
		Cy - clone	Dro- ught	Earth quakes	Fire	Flood	Tsu- nami	Hail storm	Land slide	Ava- lances	Cloud burst	Pest Attack	Cold Wave / Frost	
1	Period of occurrence					2012								
2	Total number of districts in the State					5								
3	Number and names of districts affected													
4	Number of villages affected					1059								
5	Population affected (in lakh ha)					60581								
6	Total land area attached (in lakh ha)													
7.1	Cropped area affected													
7.1.1	Total cropped area affected (in lakh ha)					1061.82								
7.1.2	Estimated loss to crops (Rs. in lakh)													
7.1.3	Area where crop damage was more than 50%													
7.2.	Percentage of cropped area held by SMF													
7.2.1	In State as a whole													
7.2.2	In the affected districts													
8	Houses damaged													
8.1	No. of houses damaged (Total)					14655								
8.1.1	Fully damaged pucca houses													
8.1.2	Fully damaged Kutcha houses					239								
8.1.3	Severally damaged kutcha houses					10								
8.1.4	Severally damaged Pucca houses					1082								
8.1.5	Partly damaged houses (Pucca+Kutcha)					12377								
8.1.6	No. of huts damaged					363								
8.2	Estimated value of damage to houses (Rs. In lakh)													
9	No. of human lives lost					3								
10	No. of persons who suffered grievous injuries													
11	No. of persons who suffered minor injuries													
12	Animal & Poultry Loss													
12.1	No. of milch animal lost					23								
12.1.1	Buffalo/Cow/Camel/Yak													

12.1.2	Sheep / Goat													
12.1.3	Others (indicate name)													
12.2	No. of Draught animals lost													
12.2.1	Camel /Horse / Bullock													
12.2.2	Calf/Donkey/Pony/Mule													
12.2.3	Others (Indicate name)													
12.3	No. of Poultry birds lost													
13	Damage to public properties													
13.1	Roads (All)	Length				1171.84								
		Estimated Loss (Rs. in lacs)				8517.46								
13.1.1	State Roads	Length				532.32								
		Estimated Loss (Rs. in lacs)				3208.84								
13.1.2	District Roads	Length				186.00								
		Estimated Loss (Rs. in lacs)				1340.57								
13.1.3	Village Roads	Length				453.52								
		Estimated Loss (Rs. in lacs)				3868.05								
13.2	Bridges & Culverts	No.				102								
		Estimated Loss (Rs. in lacs)				1644.08								
13.2.1	Bridges	No.				1								
		Estimated Loss (Rs. in lacs)				1262.48								
13.2.2	Culverts	No.				101								
		Estimated Loss (Rs. in lacs)				381.6								
13.3	Drinking Water Supply	No. of schemes												
		Estimated Loss (Rs. in lacs)												
13.4	Irrigation Sector	No. of schemes				797								
		Estimated Loss (Rs. in lacs)				3791.16								
13.5	Power Sector	No. of schemes				364								
		Estimated Loss (Rs. in lacs)				115.8								

13.6	Education Sector														
13.6.1	Primary Schools (Damaged / Destroyed)	No. of buildings													
		Estimated Loss (Rs. in lacs)													
13.6.2	Middle Schools (Damaged /Destroyed)	No. of buildings													
		Estimated Loss (Rs. in lacs)													
13.6.3	High / Higher Secondary Schools (Damaged /Destroyed)	No. of buildings					10								
		Estimated Loss (Rs. in lacs)					2000.00								
13.6.4	Other educational institutes (Damaged /Destroyed)	No. of buildings													
		Estimated Loss (Rs. in lacs)													
13.7	Health Sector	No. of buildings					85								
		Estimated Loss (Rs. in lacs)					5000.00								
13.7.1	PHCs (Damaged /Destroyed)	No. of buildings					5								
		Estimated Loss (Rs. in lacs)					1500.00								
13.7.2	CHCs (Damaged /Destroyed)	No. of buildings					5								
		Estimated Loss (Rs. in lacs)					1500.00								
13.7.3	Other Buildings (Damaged /Destroyed)	No. of buildings					75								
		Estimated Loss (Rs. in lacs)					2000.00								
14.	Total Estimated damage to Houses, crops and Public properties														

* Information is to be given separately for each major natural disaster during the year.

Appendix-XII

Statement showing item-wise details of expenditure incurred as per approved items and norms of SDRF/NDRF

(Rupees in Lakh)													
Code No.	Items	Calamity											
		Avalanche	Cloud burst	Cyclone	Drought	Earthquake	Fire	Flood	Hailstorm	Landslide	Pest Attack	Tsunami	Cold wave/frost
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Gratuitous Relief												
(a)	Ex-gratia payment to families to deceased persons												
	(i) As per SDRF/NDRF norms	0	0	14.75	0	0	150.20	7.6	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	51	0	0	29	6	0	0	0	0	0
(b)	Ex-gratia payment for loss of a limb or eyes												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	0.275	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	1	0	0	0	0	0
(c)	Grievous injury requiring hospitalization												
	(i) As per SDRF/NDRF norms	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
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	0	0	0	0	0	0
(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
	(ii) Outside the norms	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

(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	0	0	0	57.02	0	0.208	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	2130	0	10	0	0	0	0
(f)	Gratuitous relief for families in dire need of immediate sustenance after a calamity												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	8.89	1464.956	0	0	0	0	0
	(ii) Outside the norms	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
2	Supplementary Nutrition												
	(i) As per SDRF/NDRF norms	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
	(iii) Total no. of beneficiaries	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	86.14	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligible area (ha.)	0	0	0	0	0	0	1063.46	0	0	0	0	0
	(iv) No. of S&M farmers												
(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
	(ii) Outside the norms	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
	(iv) No. of S&M farmers												
(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

	(ii) Outside the norms	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
	(iv) No. of S&M farmers												
(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
	(ii) Outside the norms	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
	(iv) No. of S&M farmers												
(e)	Agriculture input subsidy where crop loss was 50% and above												
	(i) As per SDRF/NDRF norms	0	0	0	35114.94	0	0	93.00	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total eligible area (ha.)	0	0	0	6,38,453	0	0	1550	0	0	0	0	0
	(iv) No. of S&M farmers												
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
	(ii) Outside the norms	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
	(iv) No. of S&M farmers												
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
	(ii) Outside the norms	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
	(iv) No. of S&M farmers												
6	Employment Generation												
	(i) As per SDRF/NDRF norms	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

	(iii) No. of man days generated	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) Quantum of food grains distributed as part of wage component												
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	0	2.78	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of beneficiaries	0	0	0	0	0	0	23	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
	(ii) Outside the norms	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
	(iv) Number of cattle kept in camps	0	0	0	0	0	0	0	0	0	0	0	0
	(v) Qty. of fodder(qtls.) supplied in camp												
(iii)	Water supply in Cattle Camps												
	(i) As per SDRF/NDRF norms	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
	(iii) Total no. of Tanker load	0	0	0	0	0	0	0	0	0	0	0	0
	(iv) No. of cattle camps and cattle kept therein												
(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
	(ii) Outside the norms	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	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total qty. of fodder transported (Qtls)												

(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
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of cattle moved												
8	Assistance to Fishermen												
(a)	For repair/replacement of boats, nets (damaged or lost)												
	(i) As per SDRF/NDRF norms	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
(b)	Input Subsidy for fish seed farm												
	(i) As per SDRF/NDRF norms	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
	(iii) Total eligible area (ha.)												
	(iv) No. of fish farmers												
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	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
	(iii) No. of equipments												
	(iv) No. of beneficiaries												
(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
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Qty. of materials (Qtls.)												
	(iv) No. of beneficiaries												

(b)	For Handloom Weavers												
(i)	Repairs/replacement of loom equipments and accessories												
	(i) As per SDRF/NDRF norms	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
	(iii) No. of equipments/ accessories												
	(iv) No. of beneficiaries												
(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
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Qty. of materials (Qtls.)												
	(iv) No. of beneficiaries												
10	Assistance for repair/ restoration of damaged houses												
(a)	Fully damaged/ destroyed Pucca houses												
	(i) As per SDRF/NDRF norms	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
	(iii) Number												
(b)	Fully damaged/ destroyed Kutcha houses												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	137.24	215.40	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	0	0	0	915	1436	0	0	0	0	0
(c)	Severely damaged houses												
(i)	Severely damaged Pucca houses												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	140.112	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	0	0	0	0	2224	0	0	0	0	0

(ii)	Severely damaged Kutcha houses												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	180.09 6	160.163	6.784	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	0	0	0	5628	5072	212	0	0	0	0
(d)	Partially damaged houses (both pucca and kutcha)												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	81.928	5.881	11.932	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number	0	0	0	0	0	4312	5006	628	0	0	0	0
(e)	Huts and Cattle shed damaged/ destroyed												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	68.596	50.564	29.954	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Number						3662	2697	1597	0	0	0	0
11	Provision of emergency supply of drinking water in rural areas and urban areas												
	(i) As per SDRF/NDRF norms	0	0	0	432.11	0	0	0	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total Qty. of water supplied (No. of Tankers load)												
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
	(ii) No. of beneficiaries												
13	(i) Medical care for cattle and poultry against eqidemics as a sequel to a notified natural calamity	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Total No. of cattle & poultry benefited												
14	(i) Evacuation of people affected/ likely to be affected	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
	(iii) Average cost/person												

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
	(ii) Average hiring cost per boat/day												
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	0	1270.91	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of persons provided shelters												
	(iv) No. of relief camps opened												
	(v) Average cost per person/per day												
17	Air dropping of essential supplies												
	(i) No. of sorties	0	0	0	0	0	0	0	0	0	0	0	0
	(ii) Quantity (in MTs) dropped												
18	Repair/restoration of immediate nature of the damaged infrastructure in eligible sectors												
(a)	Roads & Bridges												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	7748.889	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Cumulative length of roads repaired												
(b)	Drinking water supply												
	(i) As per SDRF/NDRF norms	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
	(iii) Total no. of schemes												
(c)	Irrigation												
	(i) As per SDRF/NDRF norms	0	0	0	5.00	0	0	5964.898	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of schemes												

(d)	Power supply (only limited to immediate restoration of electricity supply in the affected areas)												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	500.00	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
(e)	Primary Education												
	(i) As per SDRF/NDRF norms	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
	(iii) No. of primary school buildings repaired												
(f)	Primary Health Centre												
	(i) As per SDRF/NDRF norms	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
	(iii) No. of Primary Health Centres buildings repaired												
(g)	Community assets owned by Panchayats												
	(i) As per SDRF/NDRF norms	0	0	0	0	0	0	186.17	0	0	0	0	0
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) No. of community assets repaired												
19	Replacement of damaged medical equipments and lost medicines of Govt. Hospitals/ Health centres	0	0	0	0	0	0	4.21	0	0	0	0	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
	(ii) Outside the norms	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	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
22	Draining off flood water in affected areas	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	0	0	0	0	522.016	0	0	0	0	0
	(ii) Outside the norms	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
	(ii) Outside the norms	0	0	0	0	0	0	0	0	0	0	0	0
	(iii) Total no. of dead bodies disposed												
	(iv) Total no. of carcasses disposed												
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	0	0	0	0	0	0	0	0	0	0
	(ii) No. of persons trained	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	0	383.23	0	0	0	0	0
	GROSS TOTAL			14.75	35552.05		683.97	18190.00	48.878				

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