

Chapter I

1.1. Introduction

Orissa is located between 17.31 degree to 20.31 degree North latitude, 81.31 degree East longitude covering an area of 1,56,000 Sq. Km. The Bay of Bengal forms the eastern boundary of the State having a coast line of nearly 480 Kms. Basing on morphological peculiarities, geological, climatic and edaptic conditions the State is broadly divided into five natural regions.

- i) Coastal Plains
- ii) River valley and Flood plains
- iii) Rolling uplands
- iv) Plateau
- v) Mountains.

Most of the people of Orissa depend on agriculture, which is mainly rainfed and depends on monsoon. Though an early monsoon shower heals the pain of hot summer, it is often a mixed blessing for the people. Scanty rainfall causes drought, and heavy precipitation brings floods in the river systems.

Since the devastating experience of Super Cyclone, 1999 the State had encountered several floods, and that experience has forced the Govt. to review their strategy and preparedness to overcome such situations. To mitigate natural disasters, several steps have been taken to enhance the capacity of the State and the community for combating such disasters.

Generally, seven types of natural calamities occur in the state. The calamities are -

- 1. Floods / Heavy rain
- 2. Cyclones
- 3. Droughts
- 4. Fire accidents / Lightning
- 5. Boat accidents



- 6. Hailstorms and whirlwind
- 7. Heat wave

During 2005-06, the state had encountered the following types of calamities.

- 1. Floods & Heavy rain
- 2. Cyclones (Saline inundation due to Storm Surge)
- 3. Droughts
- 4. Heat wave
- 5. Fire Accidents
- 6. Lightning deaths
- 7. Hailstorms

1.2. Month of occurrence

SI.	Calamities	No. of times	Period / duration
1.	Floods / Heavy rain	4	June to October
2.	Cyclonic Storm Surge / Saline Inundation	1	3 rd week of September.
3.	Drought	1	June to October
4.	Heat Wave		March to June
5.	Fire Accidents		Around the year
6.	Lightning death		Around the year
7.	Hail Storms		March to June

1.3. Rainfall

During 2005, the state experienced inadequate rainfall / pre-monsoon rain at beginning. The rainfall in May was 43.6 mm which was less than 31.1 % of the normal rainfall. Also there was a less rainfall in most of the parts of the state from 1st June to 28th June with apprehension of dry spell and moisture stress condition. But from 29th June to 5th July, there was heavy to very heavy rainfall in coastal areas due to depression over Bay of Bengal. But from 10th July onwards there was less rain fall as compared to normal for three consecutive weeks which resulted moisture stress condition in most parts of the state.

Once again due to depression, heavy rain was experienced over north & coastal Orissa on 29.7.05 and 30.7.05. Again in August and September the monsoon



was favourable for the state and there was excess rainfall at few districts like Balasore, Mayurbhanj, Gajapati, Boudh and Nayagarh for which a medium flood had occurred in these districts.

Again due to deep depression over North West Bay of Bengal which was intensified into a cyclonic storm, heavy rainfall had occurred over coastal and south Orissa.

During 3rd week of October, Again the monsoon was very much active. Under its impact, heavy down pour occurred over north Orissa. The most affected district due to this rainfall was Balasore. The severely affected blocks of Balasore districts, namely Bhograi, Baliapal, Jaleswar and Basta experienced floods in river Subarnrekha due to heavy rainfall (from 19th October to 23rd October).

The state in general experienced normal rainfall during 2005 except few districts,. The district wise monthly average rainfall is shown at **Table-**

RAINFALL_2005 (Rainfall in mm.)

SI.	DISTRICT		JAN.			FEB.			MAR.	
		Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.
1	Angul	24.8	12.6	97.1	2.5	27.1	-90.7	24.0	24.3	-1.3
2	Balasore	15.9	14.7	8.3	0.0	31.8	-100.0	63.0	34.4	83.1
3	Bargarh	57.4	12.5	359.3	8.6	19.1	-55.1	0.0	22.0	-100.0
4	Bhadrak	49.4	11.8	318.5	0.0	29.6	-100.0	43.8	36.1	21.3
5	Bolangir	53.9	8.6	526.6	9.0	13.2	-31.9	3.9	14.6	-73.3
6	Boudh	35.0	17.0	105.9	7.0	26.8	-73.9	0.0	22.4	-100.0
7	Cuttack	21.5	9.9	117.6	0.0	28.6	-100.0	58.1	24.7	135.1
8	Deogarh	48.7	14.1	245.2	3.1	27.0	-88.4	21.3	20.6	3.2
9	Dhenkanal	22.7	10.5	115.7	0.0	21.9	-100.0	30.3	33.7	-10.2



10	Gajapati	9.0	8.1	11.1	0.5	23.0	-97.7	53.8	41.3	30.2
11	Ganjam	31.5	9.4	234.6	0.0	24.1	-100.0	30.3	32.6	-7.1
12	Jagatsinghpur	17.6	14.5	21.6	0.0	21.7	-100.0	28.0	35.5	-21.1
13	Jajpur	35.8	12.9	177.5	0.5	25.1	-98.0	39.7	28.4	39.8
14	Jharsuguda	36.4	14.1	158.2	7.8	22.9	-65.9	9.0	17.6	-48.9
15	Kalahandi	39.3	10.3	281.6	6.4	14.4	-55.9	1.2	23.7	-95.1
16	Kandhamal	33.8	10.6	218.4	2.3	29.7	-92.1	19.2	28.0	-31.5
17	Kendrapara	24.3	10.6	129.0	0.0	30.2	-100.0	17.0	35.0	-51.4
18	Keonjhar	15.0	14.6	2.5	1.5	33.8	-95.6	25.9	33.1	-21.8
19	Khordha	32.0	12.4	158.1	0.0	24.3	-100.0	33.9	22.1	53.4
20	Koraput	5.4	5.7	-4.8	0.0	8.6	-100.0	0.0	18.3	-100.0
21	Malkanagiri	10.3	2.7	281.0	0.0	4.1	-100.0	0.0	8.9	-100.0
22	Mayurbhanj	13.8	10.3	34.1	9.6	28.0	-65.6	74.3	40.2	84.9
23	Nawarangpur	64.2	6.7	858.5	16.2	14.1	14.6	0.5	15.1	-97.0
24	Nayagarh	15.0	11.7	28.5	0.0	28.6	-100.0	47.2	30.0	57.2
25	Nuapada	44.2	12.0	268.3	0.0	14.6	-100.0	0.0	19.7	-100.0
26	Puri	4.8	10.9	-55.6	0.0	25.4	-100.0	50.7	15.5	226.8
27	Rayagada	19.1	9.6	98.6	1.6	22.9	-93.0	28.3	38.0	-25.5
28	Sambalpur	58.2	14.8	292.9	8.0	24.5	-67.5	12.9	18.2	-29.2
29	Sonepur	60.0	12.5	380.0	5.8	17.2	-66.1	0.7	15.7	-95.8
30	Sundargarh	25.3	15.1	67.3	6.4	24.9	-74.5	6.6	16.0	-58.9
	Total				96.8			723.1		
St	ate Average	30.8	11.4	170.2	3.2	22.9	-85.9	24.1	25.5	-5.5



SI.	DISTRICT		APRIL.			MAY			JUNE	
		Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.
1	Angul	12.7	27.2	-53.2	43.3	52.9	-18.4	311.6	225.1	38.4
2	Balasore	71.3	62.2	14.6	87.5	108.5	-19.4	227.2	221.5	2.6
3	Bargarh	0.0	20.0	-100.0	14.6	25.6	-43.0	123.3	205.6	-40.0
4	Bhadrak	51.0	51.2	-0.3	99.9	91.4	9.3	215.2	198.2	8.6
5	Bolangir	0.0	13.4	-100.0	2.8	27.8	-89.9	115.2	202.8	-43.2
6	Boudh	0.0	16.5	-100.0	11.7	38.4	-69.6	118.3	233.8	-49.4
7	Cuttack	45.4	28.3	60.4	54.9	71.5	-23.2	162.2	210.0	-23.2
8	Deogarh	0.0	21.3	-100.0	35.8	41.9	-14.6	328.0	242.4	35.2
9	Dhenkanal	15.1	41.3	-63.5	63.2	69.6	-12.5	201.4	225.7	-10.8
10	Gajapati	66.6	65.2	2.2	69.1	107.8	-35.9	128.4	199.7	-35.7
11	Ganjam	27.1	36.6	-25.9	25.9	65.4	-65.0	97.9	168.3	-41.8
12	Jagatsinghpur	19.1	25.4	-24.7	27.4	78.0	-64.9	78.8	202.3	-61.4
13	Jajpur	70.0	46.1	51.8	76.7	93.7	-18.1	197.9	238.5	-17.0
14	Jharsuguda	0.0	15.1	-100.0	15.0	27.9	-46.2	265.6	218.8	28.0
15	Kalahandi	3.9	25.7	-84.9	19.9	41.8	-52.4	226.5	240.4	-5.7
16	Kandhamal	28.6	35.7	-19.9	73.7	67.8	8.7	186.5	207.9	-10.3
17	Kendrapara	12.8	33.9	-62.3	36.0	94.2	-61.8	77.9	208.3	-62.6
18	Keonjhar	39.7	42.1	-5.8	88.7	94.8	-6.4	342.0	241.4	41.7
19	Khordha	15.0	28.0	-46.4	41.8	60.7	-31.1	107.5	196.2	-45.2
20	Koraput	6.3	55.2	-88.6	17.1	81.9	-79.2	195.0	206.8	-5.7
21	Malkanagiri	36.1	34.8	3.8	35.9	49.1	-27.0	124.9	212.2	-41.1
22	Mayurbhanj	45.7	52.5	-12.9	87.8	101.2	-13.3	249.6	265.8	-6.0
23	Nawarangpur	29.7	34.1	-12.8	52.4	66.1	-20.7	212.8	251.8	-16.7



24	Nayagarh	33.6	39.9	-15.7	55.1	58.8	-6.4	127.7	203.5	-32.7
25	Nuapada	0.0	21.8	-100.0	0.0	31.2	-100.0	114.5	210.3	-45.6
26	Puri	6.2	18.5	-66.5	22.7	62.1	-63.5	100.7	188.0	-47.0
27	Rayagada	15.8	52.7	-70.0	61.5	87.8	-30.0	129.8	195.3	-33.9
28	Sambalpur	0.8	16.5	-95.3	36.5	32.3	13.1	287.3	221.0	30.0
29	Sonepur	0.0	15.4	-100.0	26.8	29.3	-8.4	83.5	217.4	-61.6
30	Sundargarh	1.9	16.0	-88.1	26.0	40.6	-36.0	349.9	237.4	47.4
	Total				1309.4			5487.1		
St	ate Average	21.8	33.1	-34.1	43.6	63.3	-31.1	182.9	216.5	-15.5

SI.	DISTRICT		JULY			AUGUST	•		SEPTEMBE	ER
		Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.
1	Angul	673.4	347.7	93.7	175.9	357.5	-51.2	194.6	217.5	-10.5
2	Balasore	403.3	308.6	30.7	222.0	332.1	-33.1	549.2	267.6	105.2
3	Bargarh	581.1	397.2	46.3	151.1	374.4	-59.6	168.7	222.6	-25.2
4	Bhadrak	498.6	293.6	69.8	113.9	311.7	-63.5	356.6	216.8	64.5
5	Bolangir	423.3	360.5	17.4	173.9	333.6	-47.9	241.6	237.4	1.8
6	Boudh	549.8	418.5	31.4	293.0	488.8	-40.1	328.3	244.8	34.1
7	Cuttack	614.2	308.3	99.2	240.2	339.1	-29.2	524.0	229.2	129.7
8	Deogarh	354.9	447.7	-20.7	119.5	443.4	-73.0	129.2	228.2	-43.4
9	Dhenkanal	678.6	317.9	113.5	157.2	344.8	-54.4	313.3	220.6	43.3
10	Gajapati	187.2	230.6	-18.8	178.9	253.6	-29.5	499.9	237.9	110.1



11	Ganjam	232.5	220.8	5.3	163.2	246.8	-33.9	440.3	216.3	104.4
12	Jagatsinghpur	363.3	277.3	31.0	204.3	379.1	-46.1	415.6	241.4	72.2
13	Jajpur	585.1	350.9	66.5	220.3	341.2	-35.4	335.9	238.0	41.1
14	Jharsuguda	426.2	385.8	10.5	284.8	382.9	-25.6	122.8	210.7	-41.7
15	Kalahandi	356.5	327.7	8.8	231.1	355.4	-35.0	463.1	204.6	126.3
16	Kandhamal	463.6	325.1	42.6	142.9	330.8	-56.9	643.6	239.1	169.2
17	Kendrapara	496.8	317.1	56.7	178.7	333.3	-46.4	469.3	237.3	97.8
18	Keonjhar	443.9	318.0	39.6	157.0	343.6	-54.3	249.3	241.1	3.4
19	Khordha	332.0	304.9	8.9	197.4	320.6	-38.4	416.9	234.5	77.8
20	Koraput	268.3	375.6	-28.6	249.2	393.6	-36.7	385.4	256.3	50.4

State	e Average	427.7	339.9	25.8	200.2	356.0	-43.8	349.5	231.9	50.7
Total		12831.0			6005.0			10485.2		
30	Sundargarh	317.5	386.4	-18.0	207.0	393.9	-47.4	155.7	211.5	-26.4
29	Sonepur	581.8	399.6	45.6	213.0	408.9	-47.9	170.7	228.0	-24.3
28	Sambalpur	625.3	429.5	45.6	295.7	442.4	-33.2	151.5	224.7	-32.6
27	Rayagada	212.9	259.5	-18.0	158.8	273.7	-42.0	348.6	199.1	75.1
26	Puri	333.6	292.0	14.3	191.1	297.9	-35.9	431.5	243.2	77.4
25	Nuapada	275.0	347.1	-20.8	100.5	327.8	-69.4	287.8	214.5	34.2
24	Nayagarh	526.1	288.5	82.4	240.3	288.2	-16.6	481.4	226.8	112.2
23	Nawarangpur	416.9	356.6	15.1	256.3	407.5	-36.7	442.2	225.6	96.0
22	Mayurbhanj	363.9	337.3	7.0	199.2	359.9	-44.6	318.4	262.0	21.2
21	Malkangiri	245.3	465.7	-47.3	288.6	472.8	-39.0	449.7	281.2	59.9



Annual Rainfall Average

SI.	DISTRICT	C	CTOBER		1	NOVEMBER	1	I	DECEMBER		Annual	(Jan. to De	·c.)
		Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.	Actual	Normal	% of Dev.
1	Angul	245.3	86.3	184.2	6.0	20.4	-70.6	0.1	3.3	-96.2	1714.2	1401.9	22.3
2	Balasore	431.7	170.5	153.2	0.0	34.6	-100.0	0.0	5.5	-100.0	2071.1	1592.0	30.1
3	Bargarh	71.2	52.8	72.2	0.0	10.4	-100.0	24.6	5.1	382.0	1200.5	1367.3	12.2
4	Bhadrak	253.5	145.3	74.5	4.6	37.3	-87.7	0.0	4.9	-100.0	1686.6	1427.9	18.1
5	Bolangir	118.0	68.4	73.2	1.1	7.2	-84.1	4.0	2.3	74.5	1146.7	1289.8	- 11.1
6	Boudh	159.3	90.5	76.0	0.0	21.1	-100.0	0.0	4.4	-100.0	1502.3	1623.1	-7.4
7	Cuttack	290.6	125.6	131.4	0.0	45.0	-100.0	0.1	4.1	-98.1	2011.3	1424.3	41.2
8	Deogarh	137.5	84.4	62.9	0.1	8.0	-98.8	24.9	3.5	610.5	1203.0	1582.5	24.0
9	Dhenkanal	251.0	104.4	140.4	8.4	36.2	-76.9	0.0	2.2	-100.0	1741.0	1428.8	21.8
10	Gajapati	205.1	168.6	21.7	54.1	61.8	-12.5	0.0	5.7	-100.0	1452.6	1403.3	3.5
11	Ganjam	271.6	177.7	52.7	38.8	71.1	-45.4	0.0	7.1	-100.0	1359.1	1276.2	6.5
12	Jagatsinghpur	456.4	151.1	202.0	11.3	80.4	-86.0	0.0	7.9	-100.0	1621.7	1514.6	7.1
13	Jajpur	241.7	140.2	72.4	6.7	41.0	-83.7	0.0	3.9	-100.0	1810.3	1559.9	16.1
14	Jharsuguda	95.4	54.9	73.8	10.0	7.7	29.9	43.8	4.4	895.5	1316.8	1362.8	-3.4
15	Kalahandi	50.2	74.0	-32.1	0.0	10.9	-100.0	0.0	1.6	-100.0	1398.0	1330.5	5.1
16	Kandhamal	341.2	117.7	198.2	13.1	31.0	-57.7	0.0	4.5	-100.0	1948.4	1427.9	36.4
17	Kendrapara	457.8	183.7	149.2	12.3	67.2	-81.6	0.0	5.2	-100.0	1782.9	1556.0	14.6
18	Keonjhar	252.3	101.3	151.1	0.4	20.5	-98.0	2.9	3.4	-15.4	1618.5	1487.7	8.8
19	Khordha	221.0	149.3	48.0	38.6	50.4	-23.4	0.0	5.0	-100.0	1436.1	1408.4	2.0
20	Koraput	188.7	126.1	49.6	29.6	32.6	-9.1	0.0	6.5	-100.0	1345.0	1567.2	- 14.2
21	Malkangiri	177.6	109.5	62.2	16.4	23.6	-30.4	0.0	3.0	-100.0	1384.8	1667.6	17.0



22	Mayurbhanj	300.9	114.1	163.7	1.0	21.6	-95.3	6.3	7.3	-13.3	1670.7	1600.6	4.4
23	Nawarangpur	90.1	168.6	-46.6	18.3	18.7	-2.4	0.0	4.6	-100.0	1599.5	1569.5	1.9
24	Nayagarh	212.7	134.5	58.1	12.9	39.0	-67.0	0.0	4.8	-100.0	1751.8	1354.3	29.4
25	Nuapada	51.5	68.9	-25.2	0.0	15.3	-100.0	0.0	3.2	-100.0	873.5	1286.4	-32.1
26	Puri	374.5	181.6	106.0	11.7	67.3	-82.7	0.0	6.4	-100.0	1527.4	1408.8	8.4
27	Rayagada	198.4	109.7	80.8	48.1	32.9	46.3	0.0	4.7	-100.0	1222.9	1285.9	-4.9
28	Sambalpur	163.0	54.7	198.0	4.5	12.7	-64.5	54.3	4.4	1134.8	1698.0	1495.7	13.5
29	Sonepur	101.3	59.8	69.5	0.0	11.4	-100.0	5.5	3.3	66.7	1249.1	1418.5	-11.9
30	Sundargarh	119.7	67.7	76.8	0.0	8.7	-100.0	26.0	4.2	519.0	1241.9	1422.4	-12.7
	Total	6529.1			348.0			192.5			45585.9		
St	tate Average	217.6	114.7	89.7	11.6	31.5	-63.2	6.4	4.5	42.6	1519.5	1451.2	4.7



Chapter-II

2.1. Flood / Heavy Rain - 2005.

The State had experienced floods / heavy rain situations in five phases during 2005. The miseries started from the last week of June and continued till last week of October. The occurrence of floods and districts affected are given in Table below.

Phases of flood	Period of occurrence	Districts affected
1 st Phase (flood)	29 th June to 5 th July	Bhadrak, Jajpur, Kendrapara
2 nd Phase (Flood)	29 th July to 6 th August	Bhadrak, Jajpur, Kandhamal, Cuttack, Kendrapara, Puri, Nayagarh
3 rd Phase (Flood)	9 th September to 13 th September	Balasore, Mayurbhanj, Gajapati, Boudh.
4 th Phase (Heavy rain / Saline submergence/Flood)	17 th September to 19 th September	Kendrapara, Bhadrak, Rayagada, Gajapati, Puri, Balasore, Malkangiri.
5 th Phase (Heavy Rain & Flood)	19 th October to 23 rd October	Balasore and Mayurbhanj.

2.1.1. Cause

1st Phase Flood - Heavy rainfall occurred at most places over North Orissa and many places over South Orissa due to depression centered at Jamshedpur at 8.30 Hrs IST on 28.6.05. Due to heavy rain fall in its upper catchments flood came in river Baitarani. The water level of river Baitarani crossed danger level on 29.6.05. The flood situation continued for one week.

2nd **Phase Flood** - Due to depression over Bay of Bengal, heavy rainfall occurred over North Orissa and coastal Orissa on 29.7.05 and 30.7.05. As a result flood came in river Baitarani, Mahanadi (partly) and Salunki river in Kandhamal district.

3rd **Phase Flood** - During 9th September to 13th September, heavy and continuous rainfall experienced in North Orissa and some parts of South Orissa.



Due to its effect, flood came in river Jalaka of Balasore district, river Jambhira and Sororai of Mayurbhanj district, river Vamsadhara in Gajapati district and river Tel in Boudh district. Also flood like situation was occurred in some parts of Nayagarh district due to heavy downpour.

4th Phase Flood - A deep depression over North West Bay of Bengal lay centered at 17.30 Hrs IST about 80 Km East South East of Puri on 18.9.05. The system intensified into a cyclonic storm. Fortunately the system did not cross over Orissa coast. It crossed Andhra coast. Due to its effect heavy rainfall experienced in coastal districts and southern districts. Vast crop areas of coastal districts had been affected due to saline water submergence and heavy rain. Some areas of Malkanagiri District have been affected due to flood in Sileru & Sveri river.

5th **Phase Flood** - Heavy to very heavy rainfall was experienced in Balasore district from 19.10.05 to 23.10.05. As a result flood situation occurred in 7 blocks of Balasore district. The severely affected blocks were Bhograi, Baliapal, Jaleswar and Basta.

2.1.2. Impact

13 districts had been affected due to floods in five phases in the year 2005. The date of occurrence and districts affected are as follows.

Month	Districts in Total	Rivers			
	Bhadrak, Jajpur, Kendrapara, Cuttack, Puri, Balasore, Mayurbhanj, Gajapati, Boudh, Nayagarh, Malkangiri, Kandhamal , Rayagada	Subarnarekha, Slunki, Vamsadhara, Brahmani,			

Besides above, Kendrapara, Bhadrak, Puri & Jagatsinghpur districts were partially affected due to storm surge and saline submergence. So also Angul, Balasore, Boudh, Deogarh, Dhenkanal, Kalahandi and Sambalpur districts had been affected due to Heavy rain during the year 2005.



2.1.3. Area Affected

1. **1**st **Phase Flood** (29th June to 5th July)

SI.	Districts	Blocks	G.P.	Village	Population in lakh
1	Bhadrak	4	36	156	1.92
2.	Jajpur	3	33	154	1.29
3	Kendrapara	2	14	39	0.44
	Total	9	83	349	3.62

2. **2**nd **Phase Flood** (29th July to 6th August)

SI.	District	Blocks	G.P	Village	ULB affected	Wards affected	Population affected in lakh
1.	Bhadrak	5	78	385	-	-	4.22
2.	Jajpur	10	146	596	1	2	6.31
3.	Kandhamal	3	16	48	1		0.15
4.	Cuttack	8	46	128	3	48	0.24
5.	Kendrapara	4	83	372	1	11	4.75
6.	Puri	3	4	7	-	-	0.03
7.	Nayagarh	4	47	214	-	-	0.25
	Total	37	420	1750	6	61	15.95

3. **3**rd **Phase Flood** (9th September to 13th September)

SI.	District	Blocks	G.Ps	Villages	ULBs	Population in lakh
1.	Balasore	4	33	204	2	0.78
2.	Mayurbhanj	3		45		0.20
3.	Gajapati	1	-	-	-	-
4.	Boudh	1	-	5	-	0.01
	Total	9	33	254	2	0.99



4. 4th Phase Flood & Saline Submergence (17th September to 19th September)

SI.	District	Blocks	G.Ps	Villages	ULBs	Population in lakh
1.	Kendrapara	3	11			-
2.	Bhadrak	2	23	85	-	-
3.	Rayagada	Cro	op Area Affect	ed	-	-
4.	Gajapati	Cro	op Area Affect	ed	-	-
5.	Puri	Cro	op Area Affect	:ed	-	-
6.	Balasore	3	23	19	-	-
7.	Jagatsinghpur	1	1 4 13		-	-
8.	Malkangiri	1	2	-	-	
	Total	10	63	126	-	-

5. **5**th Phase Flood & Heavy Rain (19th October to 23rd October)

Only Balasore district was affected severely. 1040 villages of 126 GPs of 7 blocks of this district were affected.

2.1.4. Area affected (from phase-I to phase-V)

SI. No.	District	Blocks affected	GPs Affected	Villages Affected	ULBs Affected	Population Affected
1.	Jajpur	10	162	711	-	6.66
2.	Malkangiri	1	2	9	-	0.08
3.	Kandhamal	10	93	237	-	-
4.	Mayurbhanj	1	-	-	-	-
5.	Boudh	1	5	5	1	0.01
6.	Rayagada	11	108	930	-	0.28
7.	Nayagarh	7	48	439	-	3.50
8.	Gajapati	4	22	180	-	0.22
9.	Bhadrak	5	78	385	-	4.22
10.	Kendrapara	4	83	378	1	4.05
11.	Cuttack	4	-	20	1	0.04
12.	Deogarh	3	55	401	1	-
13.	Angul	8	153	525	-	-
14.	Puri	3	5	8	-	-



2.1.4. Loss of life & properties

a) House Damage

SI	Districts	No. of House damaged					
		Fully	Severely	Marginally	Total		
1	Balasore	602	1814	8494	10910		
2	Bhadrak	-	35	174	209		
3	Jajpur	110	320	1113	1543		
4	Dhenkanal	15	511	1680	2206		
5	Kalahandi	-	78	1203	1281		
6	Mayurbhanj	3	106	541	650		
7	Malkangiri	-	5	5	10		
8	Nayagarh	1	-	1289	1290		
	Total	731	2869	14499	18099		

b) Human Live Lost

SI.	District	Name & Address	Age	Cause of Death	Date of Death
1	Bhadrak	Manas Barik, S/o-Duryodhana, Vill- Nimasahi, Tihidi	18	Swept away	01.08.2005
		Basudev Swain, S/o-Jagabandhu, Vill- padmapokhari, Dhamnagar	26	Swept away	30.06.2005
2	Balasore	Nabin Jena, S/o-Suka, Vill-Barundiha, Basta	-	Swept away	14.09.2005
		Kumari Mani Jena D/o-Siba, Vill- Barundiha, Basta	-	Swept away	14.09.2005
3	Cuttack	Rasmi Ranjan Swain ,S/o-Pravakar, Vill- Sankhamari, Baramba	-	Drowning	03.08.2005
4	Dhenkanal	Akshay Sngh S/o-Tinka, Vill-Manitiri	-	Swept away	-
5	Angul	Nimei Pradhan, S/o- Madan ,vill- Haribareni	50	Swept away	29.07.2005
		Somanath Dehuri, S/o-Sukuru ,Vill- Muchhigadia	-	Swept away	30.07.2005
6	Ganjam	Hari Patra, S/o-Banchhu Vill- Surada	-	Swept away	20.09.2005
7	Jajpur	Kishan Mishra, Vill- Jagannathapur	-	Wall Collapse	-
		Mahiman Singh Chouhan,Vill- Nausira	-	Drowning	-
		Prasanna mallick ,Vill-Chandia		Drowning	31.07.2005
		Dhirendra mishra, vill-Nakhei		Drowning	01.08.2005



		Kunu dehuri, Vill-Majhipada	-	Snake bite	-
8	Kandhamal	Sarojini pradhan,W/o-Tami, Vill- Kamhanaju	-	Wall Collapse	21.09.2005
9	kendrapada	Prafulla Kar, S/o-Kunjabihari, Vill- Balipada	35	Drowning	31.07.2005
		Subash Chandra Tripathy,S/o- Mayadhar, Vill- Balipada	40	Drowning	31.07.2005
		Sananda barik,S/o-Nishakar,Vill- Barahadamunda	61	drowning	01.08.2005
10	Nayagarh	Pramoda kumar Sethy, S/o- Ramachandra, Vill- Basudhia	-	Drowning	13.09.05

c) Crop Damage

(In Hector)

SI. No.	District	Crop Area Affected	Crop Area Sand cast
1.	Jajpur	6122	1782.93
2.	Malkangiri	41.21	0.6
6.	Rayagada	2305.9	2305.9
7.	Nayagarh	300.54	300.54
8.	Gajapati	1955.67	0.50
9.	Bhadrak	78770	11.00
11.	Cuttack	718	6.33
13.	Angul	5.0	-
14.	Puri	3944	-
	Total	94162.32	4407.80

d) Damage to Infrastructure

SI.	District	I	Roads /Bi	uildings		River Emban-	MIPs	LIPs	No. of Utilities	Financial loss
		PWD	RD	GP / PS	Muni- cipal	kment			damage d	(Rs. In lakh)
1.	Kendrapara	28	9	-	-	244	25	574	880	997.35
2.	Gajapati	4	-	-	11	7	-	-	56	273.98
3.	Boudh	-	7	-	-	46	-	-	225	230.00
4.	Jajpur	57	147	1014	123	332	56	580	3384	13190.93
5.	Cuttack	24	230	16	52	163	61	308	854	758.70
6.	Bhadrak	133	528	1124	115	257	8	562	2262	3276.99
7.	Nayagarh	30	42	329	25	103	32	-	696	397.50



8.	Deogarh	4	14	285	15	23	22	-	642	114.90
9.	Angul	-	-	-	-	-	-	-	907	707.00
10.	Rayagada	15	91	-	-	48	14	-	-	-
11.	Kandhamal	70	50	97	25	11	14	96	757	2981.46
12.	Puri	19	88	7	-	129	-	-	352	1406.60
	Total	384	1206	2872	366	1363	232	2120	11015	24335.41

Loss assessment

11015 nos. of public utilities were damaged during floods/heavy rain 2005. The total loss during the floods was **Rs. 243.35 crore**.

2.1.5. FLOOD MANAGEMENT

a) Rescue

In all phases of flood, flood warning messages were communicated to affected districts well in advance. People from low lying areas were shifted to safer places. ODRAF teams deployed in the affected areas of Balasore, Bhadrak & Jajpur districts. 152 nos. of boats were engaged in relief and rescue operation. The position of boats deployed is given below.

District	No. of Boats deployed
Bhadrak	134
Jajpur	9
Balasore	3
Mayurbhanj	9
Total	155

b) Evacuation

3459 no. of people have been evacuated from low lying areas during floods. They were provided with adequate quantity of dry foods such as Chuda, Gur, and Biscuits. The district wise evacuation of people is given below.

District	People evacuated
Jajpur	2157
Kendrapara	52
Balasore	1250
Total	3459



In order to meet the effect of deep depression over Bay during 17th September to 19th September, 11615 no. of persons were evacuated from low lying areas of Kendrapara, Bhadrak, Rayagada, Jagatsinghpur and Malkanagiri district. The district wise position is as follows:

District	People evacuated
Kendrapara	5900
Bhadrak	4200
Rayagada	100
Jagatsinghpur	815
Malkangiri	600
Total	11615

46 no. of fishermen were reported missing due to effect of cyclonic depression. 33 no. of fishermen were rescued and others returned safety.

c) Free Kitchen

- (i) During 2nd phase flood, 521 people were provided with free kitchen in 10 centres in Bhadrak, Kandhamal, and Kendrapara district. Also due to heavy rainfall some villages of Sambalpur, Deogarh, Angul, and Dhenkanal were marooned. 820 persons of these districts were provided with free kitchen in 3 centres.
- (ii) During $3^{\rm rd}$ Phase flood, 800 persons were provided with free kitchen in Mayurbhanj district.
- (iii) High tidal wave came in river Baitarani and Mantei of Bhadrak district. Some villages of Chandbali & Basudevpur area were marooned. 12 free kitchen centres were opened for two days.

Also free kitchen was also provided to 100 persons of Gunupur village of Rayagada district.

(iv) During 5th Phase flood, 2877 nos. of persons were provided with free kitchen in 47 centres in Bhograi and Baliapal blocks of Balasore district.



d) Emergent Relief

Qtl 27023.69 of rice, Qtl. 2511.52 Chuda and Qtl.251.32 Gur were distributed among the affected people in different districts. The district wise distribution of emergent relief is given in Table below.

	 			
SI.	District	Rice	Chuda	Gur
1.	Bhadrak	7338.78	23.84	1.85
2.	Jajpur	8031.06	472.44	48.23
3.	Balasore	7130.77	1924.47	191.36
4.	Cuttack	6.13	18.44	1.79
5.	Puri	50.00	57.33	5.94
6.	Kendrapara	4358.95	-	-
7.	Dhenkanal	-	8.50	1.25
8.	Mayurbhanj	108.00	6.50	0.90

Emergent Relief (In Qtl.)

e) Health & Sanitation

In order to prevent out-break of any epidemics; medical teams were deployed to the flood affected districts well in advance. Essential drugs like antibiotics, Paracetamol Tablets, anti-snake venom and bleaching powder were supplied to affected areas. 222 nos. of medical teams had been deployed. 104 nos. of medical centers were opened. 28958 nos. of ORS packets were districts. A district wise health & sanitation measure taken is given below:

SI.	District	Medical Team deployed	Medical Centers opened	ORS Packets distributed
1.	Bhadrak	61		12680
2.	Jajpur	72		14325
3.	Kendrapara	63		
4.	Cuttack	Cuttack 4		609
5.	Balasore	22	104	1344
	Total	222	104	28958



f) Drinking Water

Halogen Tablets distributed - 190977
Wells disinfected - 5040
Tube wells disinfected - 4093
Water Sachet distributed - 15000

g) Animal Care

Affected animals were shifted to safer places and provided cattle feed. 53 mobile veterinary teams were deployed. 14076 nos. of animals treated. 37550 vaccinations were done. 483.5 MT of cattle feed were supplied to affected areas. The district wise position is given in Table mentioned below.

SI.	District	Veterinary Team deployed	Cattle treated	Cattle Vaccinated	Cattle Feed supplied in MT
1	Bhadrak	14	6840	25400	100
2.	Jajpur	21	5757	12150	282
3.	Kendrapara	11	1471	39300	35
4.	Balasore	7	1479		100
5.	Puri				1.5
	Total	53	14076	37550	483.5

h) Ex-Gratia Assistance

As per CRF norm ex-gratia assistance @ Rs.50, 000/- was paid to the next of the kin of the deceased persons died due to flood 2005.

i) House Building Assistance

House Building Assistance was paid out of CRF to the affected people whose houses were damaged due to flood and heavy rain. An amount of Rs.182.00 lakh had been provided to Collectors for distribution of House Building Assistance among flood victims.



2.2. Drought - 2005

The state of Orissa experienced moderate drought in some parts during the year-2005. Some districts in the State had received inadequate and deficient rainfall during 2005 monsoon period. As a result, the Kharif crop became affected by drought like situation. The month-wise rainfall due to southwest monsoon and district-wise deviation is mentioned below.

a) May, 2005

- 9 Districts having Deviation -50% and above.
 - Bolangir(-89.9), Boudh (-69.6), Ganjam (-65.0),
 Jagatsinghpur (-64.9), Kalahandi (-52.4), Kendrapara (-61.8),
 Koraput (-79.2), Nuapada (-100) & Puri (-63.5)
- 6 Districts having Deviation (- 30% to -50 %)
 - Bargarh(-43.0), Gajapati (-35.9), Jharsuguda(-46.2), Khordha (-31.1),
 Rayagada (-30.0)), & Sundargarh (-36.0).
- 3 Districts having Deviation (- 20% to -30%)
 - o Cuttack (-23.2), Malkangiri (-27.0) & Nawarangpur (-20.7)

Average Rainfall deviation of the State for the month of May-2005 is -31.1%.

b) June, 2005

- 3 Districts having Deviation 50% and above
 - o Jagatsinghpur (-61.4), Kendrapara (-62.6), Subarnapur (-61.6)
- 11 Districts having Deviation (- 30% to -50 %)
 - Bargarh (-40.0), Boudh (-49.4), Bolangir (-43.2), Gajapati (-35.7), Ganjam (-41.8), Khordha (-45.2), Malkanagiri (-41.1), Nayagarh (-32.7), Nuapada (-45.6), Puri (-47.0), & Rayagada (-33.9)
- 1 District having Deviation (- 20% to -30%)
 - Cuttack (-23.2)



8 Districts having rainfall more than Normal

Angul (+38.4), Balasore (+2.6), Bhadrak (+ 8.6), Deogarh (+35.2), Jharsuguda (28.0), Keonjhar (+41.7), Sambalpur (+30.0) & Sundargarh (+47.4)

Average Rainfall deviation of the State for the month of June-2004 is -15.5%.

c) July, 2005

- 1 District having Deviation (- 30% to -50 %)
 - o Malkanagiri (-47.3)
- 3 Districts having Deviation (- 20% to -30%)
 - o Deogarh (-20.7), Koraput (-28.6) & Nuapada (-20.8).
- 23 Districts having rainfall more than Normal
 - Angul (+93.7), Balasore (+30.7), Bargarh (+46.3), Bhadrak (+69.8),
 Bolangir(+17.4), Boudh(+31.4), Cuttack(+99.2), Dhenkanal(+113.5), Ganja m(+5.3)
 Jagatsinghpur(+31.0), Jajpur (+66.5), Jharsuguda(+10.5),
 Kalahandi(+8.8), Kandhamal(+42.6), Kendrapara(+56.7), Keonjhar(+39.6),
 Khordha(+8.9), Mayurbhanj(+7.0), Nawarangpur(+15.1), Nayagarh (+82.4), Puri (+14.3), Sambalpur (+45.6), & Subarnapur (+45.6).

Average Rainfall deviation of the State for the month of July-2004 is (+ 25.8).

d) August, 2005

- 8 Districts having Deviation (- 50% and above)
 - Angul (-51.2), Bargarh (-59.6), Bhadrak (-63.5), Deogarh (-73.0),
 Dhenkanal (-54.4), Kandhamal (-56.9), Keonjhar (-54.3) & Nuapada (-69.4).
- 18 Districts having Deviation (- 30% to -50 %)
 - Balasore(-33.1),Bolangir(-47.9),Boudh(-40.1),Ganjam (-33.9),
 Jagatsinghpur(-46.1) Jajpur (-35.4), Kalahandi (-35.0), Kendrapara (-46.4), Khordha (-38.4), Koraput (-36.7), Malkangiri (-39.0), Mayurbhanj



(-44.6), Nawarangpur (-36.7), Puri (-35.9), Rayagada (-42.0), Sambalpur (-32.2), Subarnapur (-47.9) & Sundargarh (-47.4)

- 3 Districts having Deviation (- 20% to -30%)
 - Cuttack (-29.2), Gajapati (-29.5) & Jharsuguda (-25.6).

Average Rainfall deviation of the State for the month of August-2005 is (-43.8)

e) September, 2005

- 3 Districts having Deviation (- 30% to -50 %)
 - o Deogarh (-43.4), Jharsuguda (-41.7) & Sambalpur (-32.6)
- 3 Districts having Deviation (- 20% to -30%)
 - o Bargarh (-25.2), Subarnapur (-24.3) & Sundargarh (-26.4)
- 23 Districts having rainfall more than Normal
 - Balasore (+105.2), Bhadrak (+64.5), Bolangir (+1.8), Boudh (+34.1), Cuttack (+129.7), Dhenkanal (+43.3), Gajapati (+110.1), Ganjam (+104.4), Jagatsinghpur (+72.2), Jajpur (+41.1), Kalahandi (+126.3), Kandhamal (+169.2), Kendrapara (+97.8), Keonjhar (+3.4), Khordha (+77.8), Koraput (+50.4), Malkangiri (+59.9), Mayurbhanj (+21.2), Nawarangpur (+96.0), Nayagarh (+112.2), Nuapada (+34.2), Puri (+77.4), Rayagada (+75.1)

Average Rainfall deviation of the State for the month of September-2005 is +50.7%.

f) October, 2005

- 2 Districts having Deviation (- 30% to -50 %)
 - o Kalahandi (-32.1) & Nawarangpur (-46.6)
- 1 District having Deviation (- 20% to -30%)
 - o Nuapada (-25.2)
- 27 Districts having rainfall more than Normal
 - Angul (+184.2), Balasore (+153.2), Bargarh (+72.2), Bhadrak
 (+74.5), Bolangir (+73.2), Boudh (+76.0), Cuttack (+131.4), Deogarh (+62.9), D
 henkanal (+140.4), Gajapati (+21.7), Ganjam (+52.7), Jagatsinghpur
 (+202.0), Jajpur (+72.4), Jharsuguda (+73.8), Kandhamal (+198.2),



Kendrapara (+149.2), Keonjhar (+151.1), Khordha (+48.0), Koraput (+49.6), Malkanagiri (+62.2), Mayurbhanj (+163.7), Nayagarh (+58.1), Puri (+106.0), Rayagada (+80.8), Sambalpur (+198.0), Subarnapur (+69.5), Sundargarh (+76.8).

Average Rainfall deviation of the State for the month of October-2005 is +89.7%.

g) Cumulative Rainfall Position

The District wise deviation of cumulative Rainfall from May to October during monsoon 2005 was as follows.

- 1 District having Deviation (- 30% to -50 %)
 - o Nuapada (-30.9)
- 1 District having Deviation (- 20% to -30%)
 - o Deogarh (-25.7)
- 10 Districts having Deviation (- 20% or Below)
 - Bargarh (-13.2), Bolangir (-12.7) Boudh (-3.7), Jharsuguda (-5.6),
 Koraput (-9.5) Malkangiri (-16.9), Nawarangpur (-0.4), Rayagada (-1.3),
 Subarnapur (-12.2), Sundargarh (-12.1).
- 18 Districts having rainfall more than Normal
 - Angul(+27.7), Balasore(+36.4), Bhadrak(+22.3), Cuttack(+46.9), Dhenkanal(+29.7), Gajapati (+5.9), Ganjam (+12.4), Jagatsinghpur (+16.3), Jajpur (+18.2), Kalahandi(+8.3), Kandhamal(+43.7) Kendrapara(+24.9), Keonjhar(+14.4), Khordha(+4.0), Mayurbhanj(+5.5), Nayagarh(+36.9), Puri(+15.0), Sambalpur (+11.0),.

Average Cumulative Rainfall deviation of the State from May to October-2005 is (+7.5).

2.2.1. Impact on Crops

During Kharif 2005 an area of 58.21 lakh hectares of land was programmed for cultivation in the state. Out of which, 38.00 lakh hectares was for paddy cultivation and the rest 20.21 lakh hectares for non paddy and other crops. Up to the end of September 2005 an area of 35.97 lakh hectares of paddy was covered as against last year coverage of 37.58 lakh hectares.



After crop cutting experiment it was observed that in some pockets of the state, there was crop loss of 50% or more for Kharif crop due to inadequate and deficient rainfall. On the basis of the crop cutting experiment reports of the Collectors the state Government had declared 1198 villages under 28 blocks and 06 wards under 02 ULBs of 06 districts (Bargarh, Gajapati, Ganjam, Mayurbhanj and Nawarangpur) as drought affected areas having sustained crop loss of 50% and above during the year, 2005 (Kharif). The declaration of drought has been made by the Government in Revenue Department vide notification no. 18779/R dt. 19.05.06. The district-wise crop loss figure is given at Table-2.1.

NO. OF VILLAGES HAVING CROPLOSS OF 50% AND ABOVE KHARIF-2005

SI.	Name of the District			No. Blocks affec	/ULBs	No of GPs in the District	No. of G.Ps containing affected	No of villages in the District	
		Blocks	ULBs	Blocks	ULBs		villages		
1	2	2 3 4 5 6		7	8	9			
1	Angul	8	3			209			
2	Balasore	12	4	5		289	63		
3	Bargarh	12	3	5		248	40		
4	Bhadrak	7	2			193			
5	Bolangir	14	4			285			
6	Boudh	3	1			63			
7	Cuttack	14	4			342			
8	Deogarh	3	1			60			
9	Dhenkanal	8	3			199			
10	Gajapati	7	2	4		129	54		
11	Ganjam	22	18	16	2	475	138		
12	Jagatsinghpur	8	2			194			
13	Jajpur	10	2			280			
14	Jharsuguda	5	3			78			
15	Kalahandi	13	3			273			
16	Kandhamal	12	2			153			
17	Kendrapara	9	2			230			



18	Keonjhar	13	4			286		
19	Khurda	10	5			168		
20	Koraput	14	4			226		
21	Malkangiri	7	2			108		
22	Mayurbhanj	26	4	2		382	6	
23	Nawarangpur	10	2	1		169	11	
24	Nayagarh	8	2			179		
25	Nupapara	5	2			109		
26	Puri	11	4			230		
27	Raygada	11	3			171		
28	Sambalpur	9	5			148		
29	Subarnapur	6	3			96		
30	Sundargarh	17	4			262		
GR	AND TOTAL	314	103	33	2	6234	312	0

SI.	Name of the District			No. of	villages	sustained	croploss			Tot	al	Grand Total	Remarks
	2	Non-irrigated				Irriga	ted		Village	Ward	lotai		
		50% to		75% a	above	50% to	50% to 74%		bove	-			
		Village	Ward	Village	Ward	Village	Ward	Village	Ward	-			
1		10	11	12	13	14	15	16	17	18	19	20	21
1	Angul												
2	Balasore	229		279						508		508	Croploss due to Flood-05
3	Bargarh	90		58						148		148	Inadequate Rainfall
4	Bhadrak												
5	Bolangir												
6	Boudh												
7	Cuttack												
8	Deogarh												
9	Dhenkanal												
10	Gajapati	116		1		110		15		242		242	Inadequate Rainfall
11	Ganjam	165		237		286	6	74		762	6	768	Inadequate Rainfall
12	Jagatsinghpur												
13	Jajpur												
14	Jharsuguda												



GF	RAND TOTAL	636	0	585	0	396	6	89	0	1706	6	1712	
30	Sundargarh												
29	Subarnapur												
28	Sambalpur												
27	Rayagada												
26	Puri												
25	Nuapada												
24	Nayagarh												
23	Nawarangpur	30								30		30	Inadequate Rainfall
22	Mayurbhanj	6		10						16		16	Inadequate Rainfall
21	Malkangiri												
20	Koraput												
19	Khordha												
18	Keonjhar												
17	Kendrapara												
16	Kandhamal												
15	Kalahandi												

[Table-2.1]

2.2.2. Interventions

- a) A meeting was held on dt. 20.07.05 under the Chairmanship of the Minister, Revenue to asses the crop situation with a direction to the Collectors to repair defunct LI points within Rs.5000/-.
- b) Another meeting was held on dt. 27.08.05 under the Chairmanship of the Minister, Revenue and collectors are directed for immediate repair of defunct LI points out of available cash.
- c) A High-level meeting was held on 2.09.05 under the Chairmanship of the Minister, Revenue to take stock of the crop situation in the state and enhanced the cost of repair value of LI points from 5000/- to 15000/-.
- d) Under the Chairmanship of Agriculture Production Commissioner, a crop weather watch group had conducted weekly review meeting to monitor the situation and issued instructions to Collectors for appropriate action.



- e) In order to tide over the situation resulting out of scanty and inadequate rainfall in the initial Kharif period, instructions for taking up all precautionary measures were issued to Collectors to save the standing crops.
- f) The Government had directed the Water Resources Department to irrigate the Crop land from small and medium water reservoir.
- g) 395 defunct LIPs were repaired with an amount of 22.41 lakh. District wise details are at *Table-2.2*.
- h) All Collectors had been instructed to provide Food Assistance through Cards so that food security is ensured in distress pockets.
- i) An amount of Rs.37.43 lakh had been provided towards input subsidy for the affected farmers.

Position of Repair of LIPs during the year 2005-06

(Rs. In lakh)

Sl.	Name of the District	No. of LIPs proposed to be	Estimated cost of		Amount released to Collector			
		repaired	repair	Number	Amount			
1	Boudh	14	0.70	14	0.70	14		
2	Bargarh	28	1.40	28	1.40	28		
3	Deogarh	28	1.40	28	1.40	28		
4	Gajapati	13	1.95	13	1.95	13		
5	Ganjam	105	5.25	105	5.25	105		
6	Jagatsinghpur	162	8.10	162	8.10	162		
7	Koraput	28	1.40	28	1.40	28		
8	Nawarangpur	6	0.56	6	0.56	6		
9	Rayagada	11	1.65	11	1.65	11		
	Total	395	22.41	395	22.41	395		

[Table-2.2]

2.3. Fire accidents

Most of the people of the state are socially and economically backward, live in villages in thatched houses, which are prone to fire. Fire accidents generally occur during summer and it causes unpredictable loss of life and properties.

District wise loss of life and properties due to fire accident during the period under report is given below at *Table-2.3.1 & 2.3.2*.



Deaths due to Fire Accident

SI.	District	Name of the Deceased	Age	Village	Block /Tahasil / Police Station	Date of Death
1	2	3	4	5	6	7
1	Bhadrak	Kuna Dhal, W/o Surendra Pr. Dhal			Basudevpur	08.04.05
2	do	Sasmita Ojha, D/o Gouranga	4	Kanas	Bhadrak	12.05.05
3	do	Maina Gagan, S/o Madan	75	Bedeipurpal	Basudevpur	17.11.05
1	Cuttack	Fakir Das, S/o Ganeswar		Khannagar	Madhupatna	14.06.05
2	do	Raghunatha Paramanik S/o Kartik	52	Nimasahi	Purighat	14.06.05
3	do	Babita Paramanik W/o Raghunath	47	Nimasahi	Purighat	14.06.05
4	do	Ashok Swain S/o Gangadhar		Chhotipada	Salipur	14.06.05
5	do	Golap RaulW/o Gurbari Roul	35	Kanjpada	Kanpur	18.06.05
6	do	Ajaya Paramanik S/o Raghunath		Nimasahi	Purighat	24.06.05
7	do	Kabiraj Muduli S/o Baidhar Muduli	35	Badabhuin	Baramba	23.06.05
8	do	Balhei Muduli D/o Gadadhar Muduli	18	Badabhuin	Baramba	25.06.05
1	Dhenkanal	Basanta Dehury S/o Senapati Dehury		Kalada	Kamakhyanagar	02.01.05
2	do	Chagali Dehury S/o Senapati Dehury		Kalada	Kamakhyanagar	02.01.05
1	Kendrapara	Sashi Sahoo D/o late Shyamasundar		Singivi	Kendrapara	07.06.05
1	Nayagarh	Sita Pradhan W/o Narottam Pradhan		Biruda	Nayagarh	24.05.05
1	Mayurbhanj	Gehli Singh S/o Ananta Sing	18	Dakarabeda	Jaashipur	06.12.05
2	do	Chaitanya Naik S/o Chandra Naik	60	Dakarabeda	Jaashipur	06.12.05
3	do	Tarani Dei W/o Chaitanya Naik	45	Dakarabeda	Jaashipur	06.12.05
4	do	Tikina Naik D/o Budhuram Naik	3	Dakarabeda	Jaashipur	06.12.05
1	Sambalpur	Mangali Sabar D/o Kishore Sabar	10	Bisalkhinda	Sasan	15.02.05
1	Sundargarh	Ashish Dungdung, S/o Libnus	26	Jajpur	Bargaon	05.04.05
2	do	Anjali Xalxo D/o Suleman Xalxo		Gairbahal	Kutra	30.10.05
3	do	Annandita Valva D/a Culaman Valva		Gairbahal	Kutra	14.11.05
1	Subarnapur	Mamata Behera D/o Raghu Behera	10	Purusottampali	Biramaharajpur	07.03.05
2	do	Srabani Behera D/o Raghu Behera	5	Purusottampali	Biramaharajpur	07.03.05

[Table-2.3.1]



Loss of Property due to Fire Accident and Account of Relief given during the year 2005-06

(Rs. In lakh)

l	Name of the	No. of fire accident	No. of villages	No. of families	No. of Institut			Approx	imate valu	e of property lo	ost by fir	е	
	District	during the year	affected	affected	ions affecte d	Individual	Institut ions	State Govt.	Local Bodies	Total (7 to 10)	Died	Injured	No. of cattle dead
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Angul	188	165	606		8050110		155958		8206068			30
2	Balasore	743	327	532		15293750				15293750			
3	Bargarh	76		107		888220				888220			
4	Bhadrak	374	322	592		16027200				16027200	4		
5	Bolangir	78	67	370		1368000				1368000			
6	Boudh	101	93	625		9100000				9100000	1	2	6
7	Cuttack	384	384	1084		373049.5				373049.5	8	1	5
8	Deogarh	77	46	55		680450				680450			
9	Dhenkanal	229	229	530	1	7971400				7971400	1		
10	Gajapati	44	44	199		2825800				2825800			
11	Ganjam	624	756	2734		25593900				25593900			2
12	Jagatsinghpu r	261	191	337		7616000				7616000		4	4
13	Jajpur	638	258	614		8725700				8725700			
14	Jharsuguda	2	2	2		80000				80000			
15	Kalahandi	27	32	37		295850				295850			
16	Kandhamal	197	143	202		2740500				2740500			
17	Kendrapar a	351	260	378		7832400				7832400	1		
18	Keonjhar	131	129	265		2868400				2868400			
19	Khordha	240	240	842	1	10820400	50000			10870400		2	
20	Koraput	339	156	339		1546500				1546500			
21	Malkangiri	79	67	79		791150				791150			
22	Mayurbhan j	376	251	545		11540835				11540835	4		4
23	Nawarangp ur	121	107	130		1016150				1016150			
24	Nayagarh	193	193	663		5223450				5223450	3		
25	Nupapara	6	5	9		145310				145310			
26	Puri	300	299	601		7661300				7661300	1		22
27	Raygada	61	61	222		1956500				1956500			
28	Sambalpur	56	55	68	1	944930	30000			974930			
29	Subarnapu r	121	121	451		4938100				4938100			
30	Sundargarh	10	10	10		239000				239000	3		
TOT	AL	7325	5013	13228	3	165154355	80000	155958	0	165390313	26	9	73

Sl.	Name of the District	Total amoun	t of relief giver families	to affected		int of relief nstitutions	itions of relief given 1		
		Cash	Forest materials	Other	Cash	Forest material	U/S 140		
1	2	15	16	17	18	19	20	21	
1	Angul	383300						383300	
2	Balasore	834400						834400	



TOTA	L	12176586	0	45590	1000	0	0	12223176
30	Sundargarh							
29	Subarnapur	634423						634423
28	Sambalpur	4000						4000
27	Rayagada	456400						456400
26	Puri	364600						364600
25	Nuapada	1500						1500
24	Nayagarh	630429						630429
23	Nawarangpur	64150						64150
22	Mayurbhanj	276950						276950
21	Malkangiri	•		•				
20	Koraput	256150		•				256150
19	Khordha	1427450			1000			1428450
18	Keonjhar	199800						199800
17	Kendrapara	400000						400000
16	Kandhamal	204350						204350
15	Kalahandi	22100						22100
14	Jharsuguda	2000						2000
13	Jajpur	558900						558900
12	Jagatsinghpur	414550						414550
11	Ganjam	1937027		45590				1982617
10	Gajapati	186000						186000
9	Dhenkanal	590100						590100
 8	Deogarh	29650						29650
7	Cuttack	832350						832350
5 6	Boudh	568657						568657
 5	Bolangir	200000						200000
} !	Bargarh Bhadrak	53200 644150						53200 644150

[Table-2.3.2]

2.4. Lightning

In comparison to other Natural calamities, the number of death cases due to lightning is high in Orissa. It occurs through out the year. 250 persons were lost their valuable lives during the year 2005. Ex-gratia assistance @ Rs.10, 000/- per each death case had been provided to the NOKs of the victims through collectors. The detailed list of the deceased, due to lightning is shown at *Table-2.4* below.

Lightning Death

2005

District	SI.	Name of the Deceased	Age	Village/PS/Tahasil	Date of Death	
1. Angul	1	Chari Pradhan		Jaipur, PS- Kanhia	31.3.05	4



	:			:	
	2	Mangul Dehuri		Jolanda, PS- Palahara	20.5.05
	3	Santosh Kumar Pradhan		Anandamunda, PS-Handpa	25.5.05
	4	Binod Biari Kisko	42	Budhikhamari, Tdr-Talcher	14.7.05
	5	Mohadev Mukhi	42	Pallahara, Tdr- Pallahara	15.7.05
	6	Babuli Behera	25	Chhatabar, Tdr- Pallahara	15.7.05
	7	Mina Behera	40	Jhimiripali, Tdr- Pallahara	15.7.05
	8	Jhataka Behera		Arakahpal, PS- Talcher	19.7.05
	9	Jhulu Biswal	18	Ekdal, PS- Talcher	19.7.05
	10	Srinibas Dehury	50	Similipal, PS-Chhendipada	1.8.05
	11	Manas Gochhayat	30	Mahidharpur, PS- Banspal	5.6.05
	12	Tripura Nayak	12	Odas, PS- Khemar, Tdr- Palahara	5.6.05
	13	Madanmukhi	42	Palhara, Angul	5.7.05
2. Balasore	14	Prasad Singh	35	Hastiasila Samil Manisapar, PS-Nilgiri	19.4.05
	15	Smt. Sarojini Biswal	37	Bagalpur, PS-Khantapada	1.6.05
	16	Harihar Jana		Sabira, PS- Soro	1.6.05
3. Bargarh	17	Dukhishyam Nag		Dhumbhata, PS- Jhardandh	21.7.05
	18	Dalimba Dehuri		Mulbar, PS- Bhatli	21.7.05
	19	Sukruainda		Jujugaon, PS- Atabira	24.6.05
	20	Budu Pradhan		Lanambha, PS- Atabira	25.7.05
	21	Sampad Pradhan		Birhipali, PS- Sohela	14.8.05
4. Bhadrak	22	Alekha Behera	24	Jotisinghpur, Tdr- Chandbali	12.3.05
	23	Manoja Kumar Nath	16	Barandua, PS- Basudevpur	19.4.05
	24	Gopal Krushna Das		Gabasahi, PS- Bhadrak	18.4.05
	25	Bhagaban Aran	55	Kantika, PS- Dhusuri	1.6.05
	26	Kanak Aran	18	Kantika, PS- Dhusuri	1.6.05
	27	Amarendra Mohapatra	18	Jalamandua, PS- Dhamnagar	2.6.05
	28	Maniklata Barik	16	Raipur, PS: Dhusuri	7.6.05
	29	Sk.Ghani	45	Jainagar, PS- Dhamnagar	5.7.05
	30	Taranisen Rout	22	Ramachandrapur, PS- Bhandaripokhari	21.7.05
	31	Tauli Biswal	60	Kandara Gadia, PS- Tihidi	21.7.05
	32	Bidyadhar Das		Ankapada, PS- Bansada	9.9.05
5. Bolangir	33	Siba Prasad Mahananda		Daspur, Tdr- Bolangir	15.10.05
6. Boudh	34	Laxmi Mahanandia		Olanda	24.7.05



-	25	6.4 51.	1		2422005
7. Cuttack	35	Srinibas Dalei		Manapur, Tdr, Badamba	24.3.2005
	36	Sridhar Bastia @ Sudarsan Bastia		Harisaranpur, Tdr- Digiria	22.3.05
	37	Kunalata Pradhan		Pohala, Tdr- Niali	12.3.05
	38	Baishnab Ch. Pradhan		Laxminarayanpur, PS- Mahanga	24.3.05
	39	Manju Dehuri		Bentapara, PS- Athagarh	31.3.05
	40	Seshadev Behera	45	Khard, PS: Baramba	29.4.05
	41	Arun Kumar Kar	30	Dharmadaspur, PS- Mahanga	3.6.05
	42	Kusun Sundhi @ Munda	17	Gobar Samil Orda, PS-Gurudijhatia	1.6.05
	43	Bibhuti Barik	13	Gamei, P- Baramba	8.6.05
	44	Jogendra Jena		Barada,	18.8.05
	45	Santilata Bhanja		Sankarpur, Tdr- Salepur	18.8.05
	46	Md. Sajid		Sankarpur, Tdr- Salepur	18.8.05
	47	Sujata Bhoi	36	Malipur, Tdr- Kishanagar	18.8.05
	48	Baikunthanath Guru	38	Kendupali, Tdr-Banki	22.8.08
	49	Managovinda Pati		Achutpur, PS- Mahanga	18.8.05
	50	Subash Ch. Malla	31	Muguria, Tdr- Kishanagar	31.8.05
	51	Ranju Nayak	13	Nakhapada Harijan Sahi, Tdr- Narsinghpur	31.8.05
	52	Smt. Jaiga Nayak	45	Nakhapada Harijan Sahi, Tdr- Narsinghpur	31.8.05
	53	Saila Sahoo	42	Champeswar, Tdr- Narsinghpur	8.10.05
	54	Parikhita Bhoi	36	Bagalgarh, Tdr- Niali	11.10.05
	55	Manoranjan Samal		Tdr- Tigiria	19.7.05
	56	Sahadev Sethi		Dimiria, Tdr- Narsinghpur	29.9.05
	57	Anirudha Sahoo		Baradia, Tdr- Narasinghpur	23.7.05
8. Deogarh	58	Ratani Manahira		Kadalipal	12.3.05
9. Dhenkanal	59	Sulava Pradhan		Kukupangi, Hindol	21.4.05
	60	Nityananda Pati		Chitalpur, Hindol	30.4.05
	61	Narayan Mllik		Gundurapasi, Tdr- Gondia	22.3.05
	62	Amar Behera	15	Nadhnapur, PS- Sadar	19.5.05
	63	Trilochan Naik	35	Gundichapada, PS- Sadar	19.5.05
	64	Natabar Behera		Kurunti, PS-Motonga	29.9.05
	65	Sanatan Munda		Patharkata, PS-Kamakhyanagar	29.9.05
	66	Gokulananda Jena		Chadasingh, PS-Sadar Dhenkanal	1.10.05
	67	Mahura Singh		Kankadasoda, PS-Parjang	2.10.05



	68	Subrat Ku. Naik	Damal, PS- Parjang	31.3.05
	69	Anirudha Dehury	Sialmalia, PS- Parjang	29.9.05
***************************************	70	Sukadev Prusty	Arnapurnapurkhamar, Tdr- K. Nagar	5.6.05
å	71	Kumuda Behera	Subanali, Tdr- Hindol	23.6.05
	72	Karunakar Sahoo	Kankili, PS- Parjang	20.4.05
***************************************	73	Rajkishore Dehuri	Radhadeipur, PS- Gandia	31.8.05
À	74	Rahas Behera	Neulapoi, PS- Gandia	14.7.05
	75	Saori Das	Ranapasi, PS- Sadar	19.8.05
	76	Prasanta Ku. Rout	Handiphuta, PS- Motanga	12.7.05
***************************************	77	Pradeep Kumar Sahoo	Manglapur, PS-Sadar	7.10.05
10.Gajapati	78	Tilli Sabar	Mingiligrda	29.5.05
ļ	79	Suresh Sabar	Mingiligrda	29.5.05
	80	Surya Sabar	Ramachandrapur	15.6.05
	81	Lakie Sabar	Ramachandrapur	15.6.05
11. Ganjam	82	Heme Gouda	Kumari, Tdr- Purusottampur	27.8.05
	83	Ashanti Gauda	Badabadangi, Tdr- Sorada	20.5.05
	84	M.Dilesu Kanyari	Nayayanpur, Tdr- Patrapur	13.8.05
ļ	85	Anjali Mallick	Minajodi, Tdr- Sorada	19.7.05
	86	Jyotiranjan Nayak	Sundarpali, Tdr- Aska	1.10.05
	87	Balmiki Jena	Sundarpali, Tdr- Aska	1.1.005
	88	D.Laxman Patra	Dugapadar, Tdr- Khalikote	18.8.05
	89	Debaraj Pal	Khandianai, Tdr- Khalikote	18.8.05
12. Jagatsinghpur	90	Bairagi Bhoi	Balarampur, Tdr- Jagatsinghpur	29.9.05
Jagacsingripai	91	Gourang Ch. Sethi	Jagannathpur, Tdr- Jagatsinghpur	2.8.05
ļ	92	Babaji Ch. Kandi	Chikiria, Tdr- Jagatsinghpur	31.8.05
	93	Upendra Routray	Sidhabhumi, Tdr- Jagatsinghpur	4.10.05
	94	Saroj Das	Kakakpur Sasan, PS- Kujanga	2.9.05
	95	Parsuram @ Gudia Tarai	Nuagaon, Tdr- Kujanga	29.4.05
P	96	Harekrushna Sethi	Tdr- Kujanga	18.5.05
13. Jajpur	97	Sabita Jena	Nigadha, PS- Korei	4.9.05
	98	Janaki Ballav Parida	Dala, PS- Jajpurroad	27.8.05
in h	99	Akshya Kumar Nayak	Baidharpur, PS- Barchana	3.6.05



	100	Khageswar Das		Radagan, PS- Mangalpur	24.3.05
···	101	Kamala Jena		Nigadha, PS- Korei	4.9.05
ı	102	Krushna Das		Fatepur, PS- Dharmasala	21.7.05
	103	Bhikari Behera		Nilakanthapur, Dharmasala	25.8.05
	104	Sarat Mallick		Andhlo, PS- Binjharpur	7.9.05
14. Jharsuguda	105	Benu Buda	42	Ainthapali, PS- Laikera	13.7.05
	106	Meghanad Nethi		Lahamdabud, PS- Jharsuguda	23.7.05
"	107	Surendri Majhi	37	Babuchhi Pidihi, PS- Laikera	19.7.05
15. Kalahandi	108	Jogendra Rout		Chirka, Jaipatna	25.5.05
	109	Kamala Bewa	50	Chatagohira, PS- Koksara	28.4.05
	110	Khira Nag		Musapali, PS- Koksara	24.5.05
	111	Amarsingh Majhi		Khamargadar, PS-Rampur	12.3.05
	112	Dulen Sabar		Jagannathpur, PS-Bhawanipatna	29.4.05
	113	Dhrba Bhoi		Bogdori, PS- Kegaon	20.5.05
16. Kendrapara	114	Sukadev Barik		Nagapada, PS- Aul	7.5.05
	115	Trilochan Parida		Sasan, PS- Pattamundai	24.3.05
	116	Basi Mallick		Haripur, PS- Patkura	11.5.05
	117	Rabindra Das	42	Petapada, PS-Aul	23.6.05
	118	Hari Pradhan		Angulai, Tdr-Kendrapara	4.7.05
bo	119	Satrughana Behera		Bhoipada, PS- Pattamundai	29.8.05
-	120	Haladhar Mallick		Balipada	14.7.05
-	121	Chailabala Malik		Balikana	31.8.05
	122	Anam Behera	58	Jagulaipada, PS- Kendrapara	18.8.05
	123	Dibakar Behera	25	Jagulaipada, PS- Kendrapara	18.8.05
	124	Surendranath Jena	40	Garajanga, PS- Patakura	18.8.05
•••	125	Srinibas Mallick		Panki, PS- Rajkanika	18.8.05
•••	126	Sailabala Mallick		Balikana, PS- Aul	31.8.05
17. Keonjhar	127	Nirasa Patra		Binodabiharipur(Ka), PS- Champua	30.4.05
	128	Shakuntala Mahanta		Binodabiharipur(Ka), PS- Champua	30.4.05
	129	Bapun Nayak		Sarasakela, PS- Sadar	24.6.05
	130	Tarun Ku. Nayak		Gandabeda, PS- Patna	19.7.05
	131	Ananta Nayak		Kalimati, Keonjhar	21.4.05
	132	Kulamani Jena		Khalpal, Keonjhar	18.8.05



	133	Sridhar Bhutia		Soso, Keonjhar	26.6.05
	134	Sabitri Penthei		Telkoi, Keonhar	25.5.05
	135	Udayanath Penthei		Telkoi, Keonhar	25.5.05
	136	Nadia Pradhan		Podadihi, PS-Nayakote	29.5.05
	137	Neta Pradhan		Podadihi, PS-Nayakote	29.5.05
	138	Purna Kumar Patra		Khediadiha, PS-Pandpada	20.5.05
	139	Dusasan Naik		Purunuda, PS-Pandpada	20.5.05
····	140	Pinaki Naik		Kapaspada, PS-Ghatagaon	4.5.05
	141	Rindi Munda		Nuagaon, PS-Harichandanpur	23.5.05
	142	Duka Sabar		Deojhar, PS- Joda	25.6.05
	143	Raimani Lohar		Deojhar, PS- Joda	25.6.05
····	144	Sima Lohar		Deojhar, PS- Joda	25.6.05
	145	Hurshi Barik		Deojhar, PS- Joda	22.6.05
····	146	Nabina Patra		Khediadiha, PS-Pandpada	21.5.05
	147	Krushan Ch. Mohakud		Sisispal, PS-Town	28.8.05
18. Khordha	148	Bansidhar Jena		Dandigadia, Tdr- Banapur	5.5.05
	149	Kesab Muduli		Gopalpur, Tdr- Banapur	7.5.05
	150	Praksh Senapati	16	Nuapatna, Tdr- Khurda	12.3.05
	151	Laxmipriya Baik	27	Palla, GP- Totapada	23.8.05
	152	Kumari Sabar		Mudulidiha , PS- Banapur	20.7.05
	153	Kumara Jena		Olei Diha, PS- Banapur	27.8.05
	154	Nirupama Guru	3	Raghunathpur, PS-CS Pur	23.6.05
	155	Sanjay Samantaray	6	Kantamalim, PS-Begunia	29.9.05
	156	Kaibalya Baliarsingh		Sikharpada, PS- Bolgarh	25.8.05
	157	Shyam Pradhan	58	Nayakote, PS- Jankia	29.9.05
	158	Sarat Kumar Sahoo		Balarampur, PS- Begunia	31.8.05
	159	Gandharb Marthi		Sandhapur, PS- Gharsanpur	13.7.05
·	160	Banchhanidhi Jena		Pandigadia, PS- Balugaon	5.5.05
19. Koraput	161	Mana Penthia		Dhutiguda, Tdr- Borigumma	1.6.05
	162	Sambari Bhumia		Jhilimili, Borigumma	22.6.05
	163	Dharua Muduli		Chikambo, Tdr- Koraput	15.7.05
	164	Samei Sauntha		Baladeiguda, Tdr- Koraput	15.7.05
#	165	Bhuri Muduli		Bhanjaguda, Tdr- Koraput	15.7.05
	166	Sanaru Muria		Phupugam, Tdr- Kotpad	6.9.05
	167	Machha Muduli		Naranga, Tdr-Koraput	21.6.05
				-	
20. Mayurbhanj	168	Bhagabati Jani Smt.Chemi Hembram		Kosaguda, Tdr- Boriguma Nakichua, PS-Rasgovindpur	25.8.05 29.4.05



	170	Sankardan Murmu	12	Vill/PS- Rasgovindapur	30.4.05
	171	Sundar Marandi	40	Bharandia, Rairangpur PS	7.5.05
	172	Subuda Baskey	57	Chhadkata, PS- Kuliana	28.4.05
	173	Lalit Mohanta		Dumuria, PS- Karanjia	18.5.05
	174	Amin Singh		Kochilaghati, PS-Koliana	19.5.05
	175	Padmni Behera	12	Khenua, PS- Rairangpur(Rural)	24.5.05
	176	Rengasa Paleya	18	Kesadihi, Tdr- Bahalda	22.5.05
	177	Biren Das		Darkhali, PS- Kuliana	21.4.05
	178	Ranjan Biswal		Goda, PS- Udala	19.4.05
	179	Chhotarai Majhi		Badakhaladi, PS- Kaptipada	11.4.05
	180	Parbati Singh		Podaastia, PS- Baripada	10.3.05
	181	Laxman Marandi		Jarkant, PS- Jharpokharia	18.4.05
	182	Ananta Nayak		Bajratandi, Badasahi	23.5.05
	183	Khitish Leguri	24	Fagu	6.6.05
	184	Guruva Mohanta	45	Paikabasa, PS- Baripada	24.6.05
	185	Sanyasi Sing	18	Mahalibasa, PS- Khunta	19.6.05
	186	Anadi Naik		Utthani Nuagaon, Tdr-Badsahi	25.5.05
	187	Sada Sidu		Galusehi, PS-Raruan	15.7.05
	188	Chakradhar Giri		Dhanyotri, PS- Raruan	19.7.05
	189	Soren Tiriya		Dhanyotri, PS- Raruan	19.7.05
	190	Parbati Naik		Baunsabudhi, Bangiriposi Block	28.7.05
	191	Birsingh Naik	40	Rijili, Tdr- Rairangpur	28.7.05
	192	Mahadev Singh		Bhalia, PS- Betanati	17.8.05
	193	Sambari Singh	12	Sansul, PS- Baripada	1.8.05
	194	Sanjay Kumar Mallick		Jalda, PS- Udala	30.4.05
	195	Dakhina Marandi		Paunsia, PS- Badasahi	23.7.05
21.	196	Tulasabati Bhatra	8	Bhatigam, Tdr-Kodinga	28.4.05
Nawarangpur	197	Iswari Goudo	9	Bhatigam, Tdr-Kodinga	28.4.05
	198	Chaitnya Goudo	3	Bhatigam, Tdr-Kodinga	28.4.05
	199	Santisila Bagh	45	Bangalguda. Tdr- Nawarangpur	28.4.05
	200	Ram Chandra Nayak		Semela, PS-Umerkote	21.5.05
	201	Ram Sarkar		Siloti (DNK), PS- Umerkote	21.5.05
	202	Hiramani Bhotra	75	Jamuguda, Tdr- Dabugam	21.6.05
	203	Jayalu Gond	45	Parchipara, Tdr- Umerkote	27.5.05
	204	Gurubaru Bhatra		Siuni, Tdr-Dabugam	27.5.05
	205	Sahadev Bhatra	30	Gatoguda, Tdr- Dabugaon	7.6.05
	206	Caitaram Rout	40	Samalpur, PS- Raighar	6.9.05
22. Nayagarh	207	Abhimanyu Swain		Jagiapalli, PS- Khandpada	16.5.05
	208	Paramananda Jani		Serajanga, PS- Khandpada	25.5.05



	209	Sanatan Pradhan		Thanapalli, PS-Ranpur	5.6.05
-	210	Debabrata Pradhan		Pasipada, PS-Sarankul	16.5.05
	211	Trinath Sahoo		Sarankul, PS- Sarankul	7.9.05
	212	Parbati Muduli		Chakradhar Prasad, PS-Fategarh	25.8.05
	213	Suresh Das		Tarabalo, PS- Fategarh	24.8.05
in the state of th	214	Chakradhar Bisoi		Nuagaon, PS- Nayagarh	20.7.05
in the state of th	215	Debaraj Sahoo		Bhadikila, PS- Odagaon	21.6.05
23. Nuapada	216	Bisambar Majhi		Kharial , Tdr- Nuapada	21.7.05
	217	Sagar Majhi		Biri Ghar, PS- Khariar	1.6.05
24. Puri	218	Kuna Pahana		Berhampur, PS- Krushnaprasad	12.3.05
- -	219	Dharanidhar Das	45	Balakana, PS- Delang	30.8.05
	220	Gobinda Behera	40	Kamaisagarpatna, PS- Pipili	8.9.05
	221	Bhagaban Behera	22	Koudikheri, PS- Brahmagiri	6.10.05
		_			7.10.05
	222	Iran Behera	25	Godisagoda, PS- Brahmagiri	
	223	Fareg Behera	23	Godisagoda, PS- Brahmagiri	7.10.05
25. Raygada	224	Siba Naik	40	Sorisapadar, Tdr- Kasipur	29.5.05
	225	Pankajini Naik	10	Sorisapadar, Tdr- Kasipur	29.5.05
	226	Deepai Majhi	25	Phulojuba, Tdr- Kasipur	29.5.05
·	227	Gudu Lachama	15	Polama, Kalyansingpur Block	8.6.05
-	228	Kailash Ch. Sahu	34	Goiakana, Bissam Cuttack Block	20.7.05
26. Sambalpur	229	Radhesyam Bhue		Kendutikra, Tdr- Rengali	31.5.05
27. Subarnapur	230	Tahasil Majhi		Barmunda, Tdr-Subarnapur	25.5.05
28. Sundargarh	231	Prafullit Diali	40	Rajchhapla , PS-Bargaon	19.5.05
	232	Sandeep Diali	8	Rajchhapla , PS-Bargaon	19.5.05
-	233	Limka Larka	13	Panchara , PS- Kutra	19.5.05
in the second se	234	Ganesh Miluar		Kandeimunda, PS- Kutra	19.5.05
in a second seco	235	Susanta Xess	13	Telendihi, PS- Lephripara	11.3.05
To the second se	236	Karunakar Sahoo	32	Patrapara, PS- Town	20.4.05
iii iii ii i	237	Ashish Dungdung	26	Jajpur (S Pur), PS-Bargaon	5.4.05
ľ	238	Padmni Majhi	30	Kurla, PS-Bhasma	19.6.05
ľ	239	Manoj Kumar Mahakul	11	Kesaijharan, PS-Lephripara	19.6.05
	240	Charo Oram	52	Mandak, PS- Birmitrapur	25.6.05
	241	Prabhu Singh	18	Chodabandh, PS- Birmitrapur	26.6.05
	242	Sumitra Munda	32	K.Bolang, Sundargarh	25.6.05
	243	Dasami Munda	8	Belkudar, PS: Lahunipara	28.6.05
<u></u>	244	Sebian Jojo		Toda, PS- Koira	5.6.2005



245	Sankirtan Pradhan	40	Subalaya, PS- Sundargarh	29.7.05
246	Subrat Ch. Naik	22	Kiripsira, PS- Bhasma	20.7.05
247	Joshnarani Panda	35	Jatatgarh, PS- Sadar	20.7.05
248	Kumbhakarna Mallick	38	Khandadhuda	19.8.05
249	Lelen Tete		Kadamdihi, PS-Raibaga	17.9.05
250	Kandri Bariha		Bourkela, PS- Banaigarh	24.7.05

[Table-2.4]

2.5. Hailstorm

375 villages of 11 districts were affected due to hailstorms and whirlwinds during the year 2005. **Rs.90.20** lakh have been provided to the Collectors of Sundargarh, Nayagarh, Bargarh, Dhenkanal, Kalahandi, Jharsuguda and Sambalpur districts, out of CRF for disbursement of House Building Assistance, providing Input Subsidy to the affected farmers sustained crop-loss 50% or more, and repair / restoration of public utilities damaged due to these hailstorms / whirlwinds.

The district wise details is at *Table-2.5*

Hail Storm / Whirlwind (2005-06)

(Amount in lakh)

						Causality	/ Injured
		Nature of	Date of	Name of Tahasil	No. of	causancy / mjarca	
SI.	District	Calamity	Occurrence	/ Block Affected	Villages Affected	Human	Cattle
1	2	3	4	5	6	7	8
1	Mayurbhanj	Whirlwind	19.04.05	Badasahi	1	-	-
2	Sundargarh	Hail Storm	30.04.05	Hemagiri	1	-	-
		Whirlwind	28.05.05	Chhatenpali	1	-	-
3	Puri	Whirlwind	02.05.05 & 03.05.05	Krushnaprasad	14	1	-
4	Bhadrak	Whirlwind	12.05.05	Bhadrak Town	1	-	-
5	Khordha	Hail Storm	11.05.05	-	1	-	-
6	Nayagarh	Whirlwind	29.04.05, 12.05.05 & 03.06.05	Khandapara	-	-	-
7	Bargarh	Whirlwind	10.06.05	Attabira & Baragarh	4	-	-



		Hail Storm	01.05.05	Attabira	4	-	-
		Hail Storm	06.03.06 & 10.03.06	6 blocks	141	-	-
8	Dhenkanal	Whirlwind	08.06.05	Hindol	3	-	-
9	Kalahandi	Hail Storm	06.03.06 & 07.03.06	Bhwanipatna, Dharmagarh & Junagarh	41	-	-
10	Jharsuguda	Hail Storm	11.03.06	Kolabira & Laikera	15	-	-
11	Sambalpur	Hail Storm	10.03.06	6 blocks	148	-	-

	District	of Pro	nate Loss operty t in Lakh)	Crop damage	Relief Assistance Provid			
SI.		Individ ual	Govt.	more than 50% (in hect.)	House Building Assistance	For repair / restoration of public utilities	For input subsidy on crop loss	Total amount released
1	2	9	10	11	12	13	14	15
1	Mayurbhanj	0.12	-	-				0.00
2	Sundargarh	18.16	-	-	7.38	2.80		10.18
		0.05	-	-				0.00
3	Puri	5.20	-	-				0.00
4	Bhadrak	-	-	-				0.00
5	Khordha	-	-	-				0.00
6	Nayagarh	17.57	-	-	1.00	7.20		8.20
7	Bargarh	-	-	157.99				0.00
		-	1.4	-		1.40		1.40
		-	-	8945.00			19.15	19.15
8	Dhenkanal	91.00	-	-	0.308			0.31
9	Kalahandi	-	-	1536.00			7.20	7.20
10	Jharsuguda	-	-	251.00	7.25		2.34	9.59
11	Sambalpur	37.68	1.41	3587.00	23.49		10.69	34.18

[Table-2.5]



2.6. HEAT WAVE

Death due to heat wave or Sunstroke is a disaster caused by ones exposure to environmental heat and humidity. During the year 2005-06, heat wave conditions prevailed in almost all the districts of the State. The issue for inclusion of heat wave in the list of Natural Calamities has been repeatedly raised by the State Government before the Government of India and Finance Commission which is under consideration. So the ex-gratia amount @ of Rs.10, 000/- are now being sanctioned from the CMRF to the bereaved families of the sunstroke victims.

The district wise number of human causalities due to sunstroke for the year 2005-06 is shown at *Table-2.6* below.

SUN STROKE-2005

SI.	Name of the District	No. of persons died
1	Angul	19
2	Bargarh	4
3	Bhadrak	2
4	Bolangir	5
5	Cuttack	12
6	Deogarh	3
7	Dhenkanal	16
8	Gajapati	1
9	Ganjam	23
10	Jagatsinghpur	12
11	Jharsuguda	3
12	Kalahandi	1
13	Kendrapara	9
14	Keonjhar	6
15	Khordha	39
16	Malkanagiri	1
17	Mayurbhanj	14
18	Nayagarh	22
19	Puri	6
20	Rayagada	1



	Total	235
23	Sundargarh	12
22	Subarnapur	7
21	Sambalpur	17

[Table-2.6]

2.6.1. Drinking Water Problem

Due to acute heat wave conditions from April to June, all the drinking water sources were considerably dried up. As a result drinking water scarcity problem was noticed in almost all the districts. There was huge depletion of ground water level. Water tankers were deployed in scarcity pockets.

An amount of Rs.14.50 crore out of CRF was released in favour of various Departments in order to combat drinking water scarcity problem and heat wave conditions. The Department wise release of funds is given below.

Name of the Department	Amount released
R.D. Department	8.00 crore
H & U.D. Department	4.00 crore
H & F.W. Department	2.00 crore
F & ARD Department	0.50 crore
Total	14.50 crore

2.7. Boat Accidents

Due to unprecedented rain and stormy weather two boat accidents occurred during 2005. Four persons lost their lives in such accidents. The details are at shown at Table-2.7 below.

SI	District	Name of the deceased	Father/ Husband	Age	Village	Date of occurrenc e	River in which incident occurred
1	Nayagarh	Golap Behera	Hadibandhu	-	Dhobasahi	21.01.05	Mahanadi
2	Nawarangpur	Banishingh Bhotra	Damu	30	Telliguda	27.07.05	Bhaskal



3	Nawaramgpur	Kanaklata Naik	Paul	40	Telliguda	26.07.05	Bhaskal
4	Nawarangpur	Nabin Behera	Giridhari	32	Telliguda	26.07.05	Bhaskal

[Table-2.7]



Chapter-III

3.1. DISASTER MANAGEMENT INITIATIVES

The super cyclone of 1999 marked a paradigm shift in our approach to disaster management. Emphasis was laid on Planning, Preparedness and Prevention along with Relief, Restoration and Rehabilitation. Several preventive and preparedness measures were taken by the Government of Orissa for the mitigation of effects of natural as well as man-made disasters.

3.2. RECONSTRUCTION ACTIVITIES

Reconstruction works were taken up with assistance from PMNRF, CMRF, World Bank, DFID, EFC and CRF etc

3.2.1. Embankment Sector

Flood embankment for a length of about 877 km and canal embankment of 332 km has been raised/ strengthened with World Bank assistance. 82 spurs and 19 sluices have been renovated/ reconstructed. 72.47 km of irrigation embankment have been strengthened under Calamity Relief Fund (CRF) assistance. A few km length of irrigation embankment which could not be completed with World Bank assistance in the stipulated project closure period have been completed with CRF assistance

3.2.2. Road sector

Two hundred seventy five km of road have been repaired and renovated under Works Department, 448 km of road under Rural Development Department and about 85 km of urban road under Housing & Urban Development Department have also been reconstructed with World Bank assistance. About 5 km of urban road and 28.46 km of road under Works Department have been reconstructed with assistance from CRF. 10 km of road is under construction with CRF assistance. 8.2 km of road works under Works Department, 66.6 km of road under R.D. Department, which could not be completed with World Bank assistance in the stipulated project closure period, have been completed with CRF assistance



3.2.3. Water Supply

Works in respect of installation of pump sets, construction of bore wells and tube wells and lying of pipe lines were undertaken in 20 urban locations in the cyclone-affected districts. Similar works were also undertaken in 64 rural locations with World Bank assistance.

3.2.4. Agro Service Centres

Five Hundred Agro Service Centres have been set up with World Bank assistance.

3.2.5. Education Sector

5757 primary schools and 1148 high school buildings have been constructed with assistance from PMNRF, CMRF, MPLAD, NFCR, OBB, other State Govt. and NGOs. 2271 primary School buildings have been constructed and handed over under DFID scheme.

3.2.5. Health Sector

216 health institutions have been improved with assistance from CMRF.

3.2.6. Lift Irrigation Sector

2555 Lift Irrigation points have been revived with DFID support.

3.3. PREPAREDNESS MEASURES

3.3.1. National workshop on heat wave

To identify the causes of unusual rise in temperature in Orissa, a National Workshop was organized in Bhubaneswar on 13.03.06. The workshop aimed at exploring the possible causes of rise in temperature leading to heat wave like situations and indicating further lines of scientific investigation as well as suggesting the remedial measures to combat such a situation. Eminent scientists and experts in the field of geology, geography, atmospheric sciences and environmental study from the reputed institutions of the country including IIT,



Delhi, IIT, Kharagpur, IMD, Delhi and Bhubaneswar, RRL, Bhubaneswar, OUAT, Utkal University and Berhampur University, ORSAC and other institutions participated in the workshop.

3.3.2. Multi-purpose cyclone shelters

97 large size multi-purpose cyclone shelters (MCSs) have been constructed along the coast. These buildings have been handed over to the Cyclone Shelter Management and Maintenance Committees (CSMMCs).

3.3.3. Communication

a. A dedicated civil VHF network has been set up to link Blocks, Tahasils and some vulnerable Gram Panchayats with the District headquarters. 402 VHF base stations have been commissioned, 36 vehicle mobiles installed in



the office vehicles of Collectors, R.D.Cs, SRC and OSDMA. 140 VHF handsets have also been provided.



procured.

- b. 22 satellite phones are available with Collectors and other disaster managers to establish contact when all other means of communication fail. 13 more are being
- c. Toll free numbers "1077" & "1070" have been installed in the emergency operation centres at district and state levels respectively.

3.3.4. Orissa Disaster Rapid Action Force

Orissa is prone to natural hazards like flood, cyclone and earthquake. With a view to providing assistance to civil administration in search and rescue operations and relief line clearance during disasters, Orissa Disaster Rapid Action Force





(ODRAF) units were created out of the personnel of Orissa State Armed police (OSAP) and APR units. Five ODRAF units have been set up at Cuttack, Chhatrapur, Koraput, and Jharsuguda & Balasore. The unit at Balasore has been manned by Armed Police Reserve (APR) personnel and this unit is under the control of S. P. Balasore. Other units are manned by personnel from OSAP. The ODRAF units have been provided with up to date search and rescue equipment and personnel trained to man the equipment.

Various types of modern emergency equipment have been provided to the ODRAF units to tackle different disasters. The details of the equipment available with the ODRAF units are provided in *Annexure-A*.

3.3.5. Training

The ODRAF personnel have been trained by the Civil defence, Manufacturers of equipment, Indian Navy and Inland Water Transport. 6 personnel of ODRAF have qualified in the aptitude test for taking diving training at Naval Diving Training centre Kochi.

3.3.6. Maintenance of Equipment

Operation and Maintenance Manuals of emergency equipment have been prepared and provided to the ODRAF units for regular operation and maintenance of equipment. To keep all the equipment in operating condition, mock drills, testing, trials are carried out regularly.

3.3.7. Proposed Initiatives

Steps are being taken for procurement of Bailey Bridges, Communication equipment and Mountaineering equipment for the ODRAF units. Initiatives have been taken for training of ODRAF personnel in national level institutes.



3.3.8. Emergency Operation Centres

Emergency Operation Centres at the State level and in 30 districts have been improved with provision of computers, fax and other equipment. Construction of multi-hazard resistant buildings for 16 District Emergency Operation Centres and one State level EOC has been taken up under the GoI-UNDP DRM Programme.

3.3.9. GIS in Disaster Management

Database on GIS platform is being developed to facilitate disaster management operations. So far, database of 14 cyclone prone districts have been completed with various information like village, block & district boundaries, drainage, river and roads. Additional layers of information like Multi-purpose Cyclone Shelters, School-cum-Shelters, and location of VHF base stations have been incorporated. Hazard mapping of Orissa with reference to BMPTC-ATLAS has been done. Tsunami vulnerability mapping of the villages located within 1.5 km from the coastline in six coastal districts is being taken up on GIS platform.

3.3.10. GIS Cell

Steps have been taken for establishment of an exclusive GIS cell in OSDMA

3.3.11. Earthquake Observatories- Sites have been selected at Lakhanpur (Jharsuguda district) and Kolanara (Rayagada district) by IMD to set up Earthquake Observatories. The building at Kolanara Block of Rayagada district has been completed in all respect for setting up the equipment.

3.4. CAPACITY BUILDING ACTIVITIES

3.4.1. Gol-UNDP Disaster Risk Management Programme

DRM programme is being implemented in 145 blocks (23263 villages, 3210 GPs, 58 ULBs) of 16 districts such as Angul, Balasore, Bhadrak, Cuttack, Ganjam, Jajpur, Jagatsinghpur, Kendrapada, Khordha, Keonjhar, Koraput, Mayurbhanj, Nuapada, Puri, Rayagada and Sambalpur. Under the programme, Disaster Management Committees have been formed in all the district and blocks. Members of Panchayati Raj Institutions have been oriented at different levels. 6380 volunteers of 145



blocks have been trained in preparation of village disaster management plans. 673 block level master trainers have been trained in search and rescue through Civil Defence Organisation; 788 master trainers have been trained in first aid through St. John Ambulance; 726 block and district level trainers have been trained in disaster mental health in collaboration with American Red Cross; 7039 teachers have been oriented at district and block levels. Disaster Management Plans have been prepared in 152 blocks, 2443 GPs and 18983 villages.

3.4.2. Urban Earthquake Vulnerability Reduction Programme (UEVRP)

UEVRP a sub-component of the Disaster Risk Management Programme, is being implemented in the three cities of Bhubaneswar, Cuttack and Sambalpur, which come under seismic vulnerability zone, Zone-III. City and ward level disaster preparedness activities are being taken up under the programme. 27 engineers have been trained on rapid visual screening method for retrofitting of the existing lifeline buildings. 17 engineers have been trained on construction of earthquake-resistant buildings at IIT, Kharagpur. Sensitization programme of the corporators and councilors of Bhubaneswar Municipal Corporation, Cuttack Municipal Corporation and Sambalpur Municipality have been conducted. Civil engineers of Cuttack have been sensitized on earthquake resistant design and construction practices. A state level 3-day workshop was conducted at Bhubaneswar on Rapid Visual Screening and Retro fitting of buildings for earthquake mitigation where in the National Seismic advisor; Padmashree Prof. A. S. Arya imparted the training to the civil engineers of Govt. Departments.

3.4.3. National Programme for Capacity Building of Engineers in Earthquake Risk Management (NPCBEERM)

NPCBEERM is being implemented in the State for capacity building of serving as well as privately practicing engineers in earthquake resistant designs and construction of buildings.13 faculty members of 4 State Resource Institutions have been trained at IIT, Kharagpur. 190 Govt. and 130 privately practicing civil engineers are proposed to be trained under the programme.



3.4.4. National Programme for Capacity Building of Architects in Earthquake Risk Management (NPCBAERM)

NPCBAERM is being implemented in the State for capacity building of Govt. as well as privately practicing architects in earthquake resistant design and construction practices. Four faculty members of Two State Resource Institutions have been trained at National Resource Institutions.

3.4.5. Training

- i. OSDMA in association with UN agencies, NGOs and State level Training Institutions is organizing workshops and training programme for capacity building of the officials at state / district / block level, Panchyati Raj Institutions and NGOs involved in disaster management.
- ii. District level training of civil engineers has been taken up by OSDMA on earthquake resistant design for construction of buildings. 1550 civil engineers have been trained.

3.5. POLICY PLANNING INITIATIVES

- State Disaster Management Policy has been enacted for the State.
 Draft Disaster Management Plan and Disaster Management Bill of the State have been prepared.
- ii. A web-based database on resources available with Government agencies/ PSUs/ members of Confederation of Indian Industries (CII) has been developed under India Disaster Resource Network (IDRN). All the 30 districts have uploaded the information, and are updating the same regularly.
- iii. A high level committee under the chairmanship of Development Commissioner-cum-Additional Chief Secretary is examining the recommendations of the National Expert Committee on building byelaws etc for its implementation in Orissa. A core group under the leadership of



National Engineering Consultant UNDP is working on modification of the building byelaws etc.

- iv. Hazard Safety Cell has been constituted by the Government in Works Department under the chairmanship of Chief Engineer (Design) to aid and advise the Govt. regarding construction of earthquake resistant buildings.
- v. Board of Secondary Education, Orissa has included disaster management themes in the syllabus of Class-VIII
- vi. Biju Patnaik University of Technology (BIPUT) has been requested to include Disaster Management in the course curriculum of the Engineering colleges of the State.
- vii. OSDMA has been identified by the Ministry of Home Affairs, Govt. of India as a partner institution in the India Disaster Knowledge Network (IDKN), which is knowledge based web portal for disaster management.

3.6. LIVELIHOOD SUPPORT ACTIVITIES

- i. With support of Food and Agriculture Organisation (FAO), 650 Pedal Pumps have been provided to small and marginal farmers of Kendrapara & Jagatsinghpur districts as livelihood support. 680 additional pumps are being distributed in the districts of Jagatsinghpur, Kendrapara, Jajpur and Ganjam.
- ii. Social Capital Restoration Programme (SCRP) was implemented through NGOs in 395 villages of 73 GPs in 8 districts. SCRP activities included: farming support to over 1200 farmers and over 1200 women; livestock supply to 750 poor women; setting up of community nurseries, 5 Agro-Service Centers, 48 irrigation facilities, 10 work-sheds for artisans, 22 community centers; raising flood embankments in Balikuda and Mahakalpada; renovation of 30 ponds; pisciculture support to farmers; upgradation of 100 acres of land; vocational training for women; research and documentation, capacity building in the field of emergency health response,



local self governance, legal awareness, women empowerment, trauma care, livelihoods, etc.

3.7. IEC ACTIVITIES & PUBLICATIONS

- i. Orissa State Disaster Mitigation Authority publishes two quarterly newsletters, **The Response** in English and **Prastuti o Punarnirman** in Oriya which, carry articles and write-ups on matters related to disaster preparedness and mitigation activities at different levels, strategies worked out in other countries for coping with disasters, etc. The newsletters have entered the fifth year of publication. The newsletters are circulated among all stakeholders: State Government Departments, NGOs, UN Bodies, PRIs and educational institutions.
- ii. The OSDMA has also brought out a book titled **Bipatti**, **Biparjaya O Suraksha** in Oriya and **Understanding Hazards**, **Dealing with Disasters** in English for the reference of students. These and several other publications, posters, booklets, etc brought out by OSDMA help generating awareness about the need for greater preparedness to reduce the impacts of disasters.
- iii. Five numbers of Short video films have been prepared for awareness development of common people. Three more video films on Search & Rescue, First Aid and ODRAF are under preparation.
- iv. Leaflets and booklets have been prepared in Oriya for information of people regarding earthquake resistant design and construction of buildings.

3.8. PROGRAMMES ON THE ANVIL

3.8.1. National Cyclone Risk Mitigation Project (NCRMP)

i. Govt of India has formulated the National Cyclone Risk Mitigation Project (NCRMP) to be implemented in 13 cyclone-prone States. The State of Orissa is one of the states to implement the said project during the period of 2004-2010. The State component of works is put at Rs.234.70 crore of which $1/4^{th}$ or Rs.58.70 crore would be the state share. The project will be



implemented in the coastal districts of Balasore, Bhadrak, Kendrapara, Jagatsinghpur, Puri and Ganjam and part of Khordha adjoining the Chilka Lake.

ii. Construction of missing embankments (46 km), shelterbelt plantation and regeneration of mangrove on government lands, construction of missing road links from nearest road heads to the shelters, multi-purpose cyclone shelters, training of disaster managers and other stakeholders, strengthening warning communication, awareness and IEC activities and modeling using GIS and remote sensing would be taken up. A few multi-purpose go downs at strategic locations would also be taken up for decentralized storage of critical supplies for the cyclone-prone areas along the coastal belt.

3.8.2. Construction of 42 Cyclone Shelters under PMNRF

The Prime Minister's Office has accorded sanction for construction of 42 cyclone shelters in coastal districts of Balasore, Bhadrak and Kendrapara. The project will be implemented by OSDMA with an overall cost of Rs. 15.00 crore and the same will be completed by June 2007. The shelter buildings will be constructed in school premises so that these can be used for school purposes during normal times. The preliminary work like soil exploration, etc has been completed and the work will be started shortly.

_



Chapter-IV

4.1. CALAMITY RELIEF FUND

Relief and mitigation expenditure on account of different calamities are meet out of CRF at the state level. As per the norms and condition prescribed by Govt. of India, a committee headed by the Chief Secretary of the State administers the fund. As per the direction of Central Finance Commission, Govt. of India and State govt. at the ratio of 75:25 share the corpus for this fund.

When a calamity of rare severity occurs, the Govt. of India sanctions fund out of NCCF, according to the gravity of the situation, arising due to impact of calamity, for providing immediate relief to the victims.

The position of both CRF and NCCF is shown at *Table - 4.1.1 & 4.1.2*FUNDS POSITION

2005-06

(Rs. in Crore)

Category of Funds	ОВ	Receipt	Unspent & surrendered of previous year	Total	Funds Released	Balance
1	2	3	4	5	6	7
CRF	-	301.55	-	301.55	300.76	0.79
NCCF	2.38	-	16.07	18.45	17.26	1.19
Total	2.38	301.55	16.07	320.00	318.02	1.98

[Table-4.1.1]

RELEASE OF FUNDS

2005-06

(Rs. in Crore)

Category of Funds	Receipt	Surrender/ augmented	Total		Funds Released		
				District	Department	Total	
1	2	3	4	5	6	7	8
CRF	301.55	-	301.55	35.28	265.48	300.76	0.79



NFCR-99		3.28	3.28	0.23	3.05	3.28	
NCCF-00		1.29	1.29		1.29	1.29	
NCCF-01		2.74	2.74		2.73	2.73	0.01
NCCF-02		2.17	2.17		0.99	0.99	1.18
NCCF-03		8.97	8.97	0.03	8.94		
NCCF-04							
Total	301.55	18.45	320.00	35.54	282.48	318.02	1.98

[Table-4.1.2]

The District and Department wise allotment of funds are shown at Table-4.1.3 & 4.1.4 respectively.

Allot	ment of Funds to Di 2005	stricts out of CRF/NCCF -06
		(Rs.in lakh)
Sl.No.	Department	Allotment Released
1	Angul	133.413
2	Balasore	481.684
3	Bargarh	168.059
4	Bhadrak	240.074
5	Bolangir	33.745
6	Boudh	6.305
7	Cuttack	483.122
8	Deogarh	2.050
9	Dhenkanal	87.910
10	Gajapati	144.970
11	Ganjam	81.784
12	Jagatsinghpur	173.607
13	Jajpur	329.018
14	Jharsuguda	0.562
15	Kalahandi	45.479
16	Kandhamal	7.200
17	Kendrapara	287.581
18	Keonjhar	13.680
19	Khordha	210.796
20	Koraput	75.332
21	Malkangiri	2.670
22	Mayurbhanj	49.027



23	Nawarangpur	26.370
24	Nayagarh	180.408
25	Nuapada	0.460
26	Puri	239.313
27	Raygada	26.477
28	Sambalpur	3.788
29	Subarnapur	6.934
30	Sundargarh	12.420
	TOTAL	3554.238

[Table-4.1.3]

Allotment of Funds out of CRF/NCCF 2005-06 DEPARTMENTS

(Rs.in lakh)

SI.No.	Department	Allotment Released
1	Agriculture	149.062
2	Commerce & Transport	62.000
3	Fisheries & Animal Resources	75.000
4	General Administration	125.750
5	Health & Family Welfare	955.720
6	Home	154.000
7	Housing & Urban Development	2060.500
8	Panchayati Raj	1485.170
9	Revenue	2.500
10	Rural Development	5079.870
11	School & Mass Education	2.270
12	Water Resources	12547.470
13	Works	4579.810
14	Spl.IG of Police, (Admn), Cuttack	3.806
15	Joint Director, IWT, Cuttack	0.542
16	OSDMA	800.450
17	Under Secretary (SR)	163.549



TOTAL	28247.469
Districts	3554.238
Grand Tota	31801.71

[Table-4.1.4]

4.2. UTILIZATION CERTIFICATE

Utilization Certificate amounting to Rs.193.26 crore has been sent to AG Orissa during the year under report against the funds provided to various departments and districts since 1999-00 till 2005-06.

[Rs. in lakh]

	District	Department	Total
CRF	1543.44	14531.23	16074.67
NCCF	409.22	2845.50	3251.72
Grand Total	1952.66	17373.73	19326.39

(1) An amount of Rs. 2120.59 crore has been received from 1999-2000 to 2005-06 under CRF and NFCR/NCCF. Out of which utilization certificate to the tune of Rs. 1666.62 crore has already been furnished to AG, Orissa till 31.03.06. The table below has shown the details.

[Rs in crore]

Fund	Receipt 1999-2000 to 2004-05	UC Submitted 1999-2000 to 2004-05	Percentage
CRF	963.11	611.59	63.50
NCCF	1157.48	1055.03	91.15
Total	2120.59	1666.62	78.59

(2) The submission of UC in respect of allotment provided to different districts and department from 1999-2000 to 2005-06 till 31.03.06 is shown at Table-4.2 below.



Year-wise Submission of UC

(Rs. in lakh)

Agency	199	9-00	200	0-01	200	1-02 UC Submitted			
	Allotment	UC Submitted	Allotment	UC Submitted	Allotment	UC Submitted			
District	29840.38	29222.17	9249.63	8298.05	4545.52	3715.99			
Department	18404.17	15160.53	22942.40	22478.44	21811.92	21020.77			
Total	48244.55	44382.70	32192.03	30776.49	26357.44	24736.76			

(Rs. in lakh)

Agency	200	2-03	200	3-04	200-	4-05	200	5-06	
	Allotment	UC Submitted	Allotment	UC Submitted	UC Submitted	UC Submitted	Allotment	UC Submitted	
District	6711.04	5701.29	7396.50	4956.47	363.75	363.75	3528.29	265.11	
Department	13627.04	12323.72	20012.87	16533.97	23232.64	23232.64	20210.35	3389.15	
Total	20338.08	18025.01	27409.37	21490.44	23596.39 23596.39		23738.64	3654.26	

[Table-4.2]

The Department and District Wise Allotment and submission of UC till 2005-06 in respect of grants received from 1999-00 to 2005-06 are shown at Annexure-B & Annexure-C respectively.

*** *** —



CHAPTER-V

5.1. MISCELLANEOUS

5.1.1. Management Information System.

Basing on the verdict and observation of Supreme Court derived out of Writ Petition (Civil) No.196/2001, the Management Information System for tracking Vulnerability to Starvation and Malnutrition came into existence 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 flood security to the people. Accordingly, Government of Orissa introduced a suitable format for regular monitoring towards malnutrition and hunger for ensuring Food security etc. with emphasis on following categories.

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

Basing on 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 in a month i.e. at the end of each fortnight to Special Relief Commissioner, Orissa. On receipt of the information from the Collectors of the State, compilation and analysis work are done at our level and making evaluation of the data as per the prescribed indicator. After analysis of feedbacks as monitoring authority, we move concerned Departments of Government and Collectors for



making necessary interventions on the feedbacks from the field. Thus, Management Information System has proved its essentiality for effective management of disaster.

CONCLUSION

Except medium floods in some districts and drought in some parts of the State the State had not encountered any major Natural Calamities during the year, 2005. The State Government has effectively managed the situation due to these medium floods and drought. The management of these disasters was comprehensive to mitigate the impact. Long Term Mitigation measures are the need of the day to combat disasters like droughts and floods. The Calamity Relief Fund does not provide for the same and the financial position of the State Government does not permit to venture into those areas. This dichotomy diminishes our capabilities though the spirit of the people remains high. The recurring disasters have a lot to contribute to the slow growth rate and delayed development in the State, especially in the field of infrastructure.

***-**



Annexure-A DEPLOYMENT OF EQUIPMENT UNDER FIVE ODRAF UNITS

SI.	Equipments	Quantity			ODR	AF UNIT		
No.			Cuttack	Jharsuguda	Koraput	Chhatrapur	Others	
1.	Hydraulic Crane 12 Ton capacity	8 nos.	4	1	1	1	1	
2	TATA Truck- (<i>Troop Carrier</i>)-6 Ton capacity	10 nos.	2	2	2	2	2	
3	TATA Truck 12Ton capacity	6 nos.	2	1	1	1	1	
4	Generator 5 KVA	13 nos.	5	2	2	2	2	
5	Generator 10 KVA	10nos.	2	2	2	2	2	
6	Concrete Cutting equipment	5 nos.	1	1	1	1	1	
7	Power saw with Portable Power Unit	10nos.	2	2	2	2	2	
8	Tree Pruner-cum-Chain saw	8 nos.	4	1	1	1	1	
9	Water Filter Portable	20 nos.	10	3	3	2	2	
10	Ramp-2 Ton capacity (fabricated) M.S.	16 nos.	4	4	4	2	2	
11	Telescopic Aluminum Ladder (40 feet long)	20 nos.	8	3	3	3	3	
12	Life Jacket	110 nos.	60	20	10	10	10	
13	Life Buoy	110 nos.	60	20	10	10	10	
14	Chain Power Saw (Stihl 026 Model)	6 nos.	2	1	1	1	1	
15	Tractor with trailer	6 nos.	2	1	1	1	1	
16	Inflatable Tower Lighting system with Generator	6 nos.	4	1	1			
17	Branch Cutting Saw (Electric Motor Drive)	7 nos.	3	1	1	1	1	
18	Branch Cutting Saw (Petrol engine driven)	14nos	6	2	2	2	2	
19	Commando Search Light	20nos. 4nos Infrared.	12 4 IR	2	2	2	2	
20	Mahindra & Mahindra FJ-460-DP/4WD Ambulance.	1nos						Asst. Fire Officer, BBSR
21	TATA SFC-407/31, AMBULANCE	3NOS	1	1	1			
22	G.I.Trunk-	70nos	40	10	8	6	6	
23	Wire Ropes & Slings	12sets	4	2	2	2	2	
24	Lifting & Pulling Machine	4nos	4					



SI. No.	Equipments	Quantity	ODRAF UNIT						
			Cuttack	Jharsuguda	Koraput	Chhatrapur	Balasore	Others	
25	Battery Chargers	11 nos	3	2	2	2	2		
26	Small Tools & Jack	12 sets	4	2	2	2	2		
27	Nylon Rope	600 Kg	300	150	150				
28	Hydraulic Tipper	5nos	1	1	1	1	1		
29	Recovery Van/Wreckage Crane	5nos	1	1	1	1	1		
30	Small rescue items like, rope, carabiner etc.	2 sets	2						
31	Submersible Pump	15nos	3	3	3	3	3		
32	Breathing Apparatus	27sets	7	5	5	5	5		
33	Diving Equipments	12 sets	4	2	2	2	2		
34	Diving Helmet	5 sets	1	1	1	1	1		
35	Chain Sharpener	2nos	2						
36	Combi tool	5sets	1	1	1	1	1		
37	Cutter	5sets	1	1	1	1	1		
38	Inflatable Rubber Dinghies with OBM	60	32	6	6	8	8		
39	Hydraulic spreader	5 nos	1	1	1	1	1		
40	Telescopic Ram Jack with Extension	5 sets	1	1	1	1	1		
41	Fork lift 3 tonne capacity	6 nos	2	1	1	1	1		
42	RCC cutting chain saw	5 nos	1	1	1	1	1		
43	Gas mask with chemical cartridge	65 sets	25	10	10	10	10		
44	Pay loader-cum-excavator	5nos	1	1	1	1	1		
45	Air compressor	3 nos	11	1	1				
46.	125 KVA Truck Mounted Generator	5nos	1	1	1	1	1		
47.	Single Phase Welding Transformer with Accessories	5sets	1	1	1	1	1		
48.	Reciprocating Pump-cum-Vehicle Washer	5 sets	1	1	1	1	1		
49.	Air Compressor with Tyre-Inflator with accessories	5 sets	1	1	1	1	1		
50.	Wooden Stand for OBM	60 nos	20	10	10	10	10		
51.	Fire Extinguishers	48 nos	12nos	6	6	6	6		
52.	Stretchers	10	2	2	2	2	2		
53.	Patient Carrying Trolley	10	2	2	2	2	2		
54.	Gas Cutting sets	5sets	1	1	1	1	1		
55.	M.F.R. Kits	7 sets	2	1	1	2	1		



Annexure-B

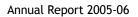
Allotment & U.C. Position in respect of Departments

CRF/NFCR/NCCF

1999-00 TO 2005-06

(Rs.in lakh)

		1999-	1999-2000 & 2000-2001			2001-2002			2002-2003			2003-2004			2004-05		2005-06		
SI.																			
No.	Department	Allotment	Ucs submitted	Balance Pending	Allotment	Ucs submitted	Balance Pending	Allotment	Ucs submitted	Balance Pending	Allotment	Ucs submitted	Balance Pending	Allotment	Ucs submitted	Balance Pending	Allotment	Ucs submitted	Balance Pending
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Agriculture	####	####	26.15	1380.19	1221.78	158.41	915.19	915.19	0.00	1113.87	1046.41	67.47			0.00	149.06		149.06
2	Commr & Trans.	420.00	399.80	20.20	101.80	98.84	2.96	34.63	34.63	0.00	38.26	38.07	0.19			0.00	62.00		62.00
3	Cooperation	####	####	2.92	####	####	0.00									0.00			0.00
4	Culture	0.00	0.00	0.00	5.87	5.44	0.43	52.90	0.00	52.90						0.00			0.00
5	Energy	####	400.00	####							255.00		255.00	99.21		99.21			0.00
6	F & ARD	493.81	492.98	0.83	399.68	372.43	27.25	551.05	484.04	67.02	596.59	536.75	59.83	91.44	86.17	5.27	75.00		75.00
7	F.S. & C.W.	####	####	0.00	1018.68	938.15	80.53	1.78	1.78	0.00	876.80	876.80	0.00	4.29	4.29	0.00			0.00
8	F & Envirn.	359.65	320.38	39.27	495.82	423.82	72.00	355.00	355.00	0.00	392.65	294.29	98.36	65.20	14.90	50.30			0.00
9	G.A.	0.00	0.00	0.00	12.64	12.64	0.00							1.25	1.25	0.00	125.75	15.00	110.75
10	H & F.W.	106.55	84.44	22.11	480.41	441.85	38.55	50.85	0.00	50.85	740.69	695.66	45.03	301.37	272.07	29.30	955.72		955.72
11	Higher Edn.	1077.02	871.02	205.99	136.95	118.12	18.83	53.29	11.11	42.18						0.00			0.00
12	Home	116.02	115.27	0.75	58.96	53.35	5.61			0.00	72.48	5.78	66.70	0.09	0.09	0.00	154.00		154.00
13	H& UD	1291.55	####	198.11	533.42	533.11	0.31	761.02	674.40	86.62	####	####	436.98	1143.10	1101.47	41.62	####	489.37	1571.13
14	Industries	201.43	201.43	0.00	25.00	25.00	0.00	16.21	16.21	0.00	1.49	1.49	0.00			0.00			0.00
15	I & PR	0.54	0.54	0.00							0.35	0.35	0.00			0.00			0.00
16	Panchayati Raj	7.18	7.18	0.00	15.51	15.51	0.00				709.03	227.63	481.40	3.00		3.00	1485.17		1485.17
17	Revenue	1.38	1.38	0.00	6.00	6.00	0.00				0.40	0.40	0.00	1.50	1.50	0.00	2.50		2.50
18	R.D.	####	5768.91	118.63	####	####	276.65	####	####	259.26	####	####	1.88	5107.60	####	78.52	####	599.73	####
19	School & M Edn.	526.00	523.75	2.25				50.00	30.00	20.00	200.00		200.00	2.00		2.00	2.27		2.27
20	Sc. & Tech.	57.38	57.38	0.00	54.07	54.07	0.00				10.94	10.94	0.00	1.00	1.00	0.00			0.00
21	Sports	30.09	30.09	0.00												0.00			0.00
22	Steel & Mines	21.54	21.54	0.00												0.00			0.00
23	ST & SC Dev.	0.00	0.00	0.00				382.68	108.93	273.75	38.51		38.51	3.50		3.50			0.00
24	W.Res.	####	####	347.56	####	####	0.00	####	####	228.30	####	####	1145.64	####	7452.77	620.61	####	####	####





25	W & C.D.	130.00	106.50	23.50				40.68	39.16	1.52	150.00	92.02	57.98			0.00			0.00
26	Works	6987.17	####	40.78	1256.25	####	32.58	1432.91	####	134.56	####	####	382.87	####	####	714.81	4579.81	171.40	####
27	AFA/U.S(S R)	####	####	0.01	441.92	435.00	6.92	####	1809.51	0.01	102.91	102.91	0.00	####	####	0.00	163.55	8.50	155.05
28	PRC., New Delhi	1477.55	1477.55	0.00												0.00			0.00
29	OSDMA	0.00	0.00	0.00	200.00	200.00	0.00	870.00	850.36	19.64	272.50	200.00	72.50	1965.19	1119.08	846.11	800.45	5.31	795.15
30	Spl.IG of Police(Admn.)															0.00	3.81		3.81
31	Jr.Director, IWT, CTC															0.00	0.54	0.23	0.31
32	Other DDOs 136.44		16.27	120.17	.17 78.34 70.09		70.09	77.36	77.36 10.65			6.87							
33	SCB Medical Coll.	0.00 0.00		0.00 0.00		.00 5.00 4.96								0.00		0.			
34	GOI (MOA)	####	0.00	####												0.00			0.00
	TOTAL	####	####	####	####	####	791.16	####	####	####	####	####	####	####	####	####	####	####	####

Annexure-C

Allotment & U.C. Position in respect of Districts

CRF/NFCR/NCCF

1999-00 TO 2005-06

(Rs.in lakh)

SI. No.	District	1999-2000 & 2000-01			2001-2002			2002-2003			2003-2004			2004-05			2005-06		
		Allotment	Ucs submitted	Balance Panding	Allotment	Ucs submitted	Balance Panding	Allotment	Ucs submitted	Balance Panding	Allotment	Ucs submitted	Balance Panding	Allotment	Ucs submitted	Balance Panding	Allotment	Ucs submitted	Balance Panding
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Angul	268.29	259.34	8.95	119.43	90.13	29.30	456.03	397.11	58.92	88.86	77.73	11.14	14.32	7.19	7.14	133.41	7.61	125.81
2	Balasore	1698.77	####	90.04	134.73	97.95	36.78	225.24	188.97	36.27	444.05	322.44	121.61	55.17	29.17	26.00	481.68	23.96	457.73
3	Bargarh	563.70	519.07	44.62	270.38	192.60	77.78	281.29	175.47	105.82	415.35	70.98	344.37	1.65	1.46	0.19	168.06	0.00	168.06
4	Bhadrak	####	####	10.53	151.87	132.63	19.24	125.72	109.95	15.78	258.26	216.90	41.36	48.01	17.18	30.84	240.07	19.73	220.35
5	Bolangir	654.60	419.88	234.72	250.11	217.83	32.29	346.24	240.23	106.01	434.33	311.92	122.41	63.17	36.14	27.03	33.75	0.00	33.75
6	Boudh	146.58	118.05	28.53	26.95	27.93	-0.98	84.06	69.91	14.16	114.93	76.91	38.01	2.20	1.97	0.24	6.31	3.46	2.84
7	Cuttack	####	####	129.48	675.20	538.75	136.45	269.91	211.29	58.62	462.58	134.19	328.38	40.58	29.59	10.99	483.12	0.00	483.12
8	Deogarh	312.14	311.92	0.22	51.43	49.13	2.30	75.69	60.18	15.52	149.92	145.63	4.30	0.68	0.60	0.08	2.05	0.08	1.97
9	Dhenkanal	1304.91	1213.51	91.41	78.24	85.61	-7.37	150.99	132.95	18.04	64.89	58.26	6.63	7.96	5.66	2.30	87.91	0.00	87.91



Annual Report 2005-06

10	Gajapati	62.88	69.69	-6.81	51.88	47.47	4.41	125.44	119.16	6.28	232.53	176.76	55.77	12.30	6.09	6.21	144.97	0.00	144.97
11	Ganjam	3197.57	2890.11	307.46	57.98	57.66	0.32	631.47	492.50	138.97	575.01	257.34	317.67	23.10	11.39	11.72	81.78	0.00	81.78
12	Jagatsinghpur	####	####	83.94	239.91	99.02	140.89	116.96	84.02	32.94	302.90	216.29	86.61	68.31	49.40	18.91	173.61	13.67	159.94
13	Jajpur	####	####	66.84	239.31	252.16	-12.85	239.31	176.32	62.99	221.03	119.09	101.94	31.80	9.50	22.30	329.02	8.07	320.95
14	Jharsuguda	546.50	446.38	100.12	90.57	86.85	3.72	45.37	40.24	5.13	54.77	46.52	8.25	1.19	1.14	0.05	0.56	0.00	0.56
15	Kalahandi	319.05	309.01	10.04	310.14	287.89	22.26	391.08	376.78	14.30	336.22	248.39	87.83	3.13	2.00	1.13	45.48	0.08	45.40
16	Kandhamal	116.27	116.03	0.24	7.14	4.99	2.14	174.93	167.79	7.14	222.69	199.98	22.71	6.00	3.62	2.38	7.20	0.00	7.20
17	Kendrapara	####	####	114.34	159.43	73.83	85.60	232.24	219.22	13.03	376.38	332.96	43.42	66.54	36.28	30.26	287.58	0.00	287.58
18	Keonjhar	835.67	805.74	29.93	85.22	76.77	8.46	269.81	217.45	52.36	132.92	64.04	68.88	30.25	1.10	29.15	13.68	0.40	13.28
19	Khordha	2178.07	2163.19	14.87	99.51	97.47	2.04	150.92	132.37	18.55	188.65	162.16	26.49	17.43	15.07	2.36	210.80	94.85	115.95
20	Koraput	38.53	32.41	6.13	82.83	73.16	9.68	173.81	171.26	2.55	219.21	211.89	7.32	14.83	2.94	11.89	75.33	0.00	75.33
21	Malkangiri	85.14	73.61	11.52	35.08	18.42	16.67	138.88	131.35	7.53	41.74	47.61	-5.87	11.02	0.20	10.82	2.67	0.00	2.67
22	Mayurbhanj	321.99	309.09	12.90	36.56	35.39	1.17	407.71	335.66	72.05	224.58	104.46	120.12	16.38	14.37	2.01	49.03	0.30	48.73
23	Nawarangpur	42.12	40.02	2.10	15.53	15.97	-0.44	98.61	97.61	1.01	139.92	90.45	49.47	3.48	2.35	1.13	26.37	0.70	25.67
24	Nayagarh	397.16	329.13	68.04	85.24	84.86	0.38	120.27	118.39	1.88	248.41	172.29	76.12	21.84	13.85	7.99	180.41	80.90	99.51
25	Nuapada	580.90	568.38	12.52	284.97	256.08	28.89	262.23	261.85	0.38	87.54	87.49	0.04	0.25	0.25	0.00	0.46	0.10	0.36
26	Puri	####	####	4.80	292.91	204.25	88.66	221.98	168.29	53.69	380.22	218.18	162.04	43.16	6.85	36.31	239.31	0.53	238.78
27	Raygada	128.73	98.71	30.03	94.96	55.10	39.86	242.39	209.14	33.25	392.97	317.14	75.84	64.98	48.48	16.50	26.48	1.56	24.91
28	Sambalpur	284.18	256.49	27.69	344.65	303.26	41.39	95.95	57.82	38.14	124.77	30.43	94.34	7.21	1.85	5.35	3.79	0.09	3.70
29	Subarnapur	140.14	106.90	33.25	148.83	130.77	18.06	112.44	99.79	12.66	332.42	314.30	18.11	7.08	6.23	0.86	6.93	0.86	6.08
30	Sundargarh	447.17	445.84	1.34	24.54	22.08	2.46	444.06	438.23	5.83	128.46	123.74	4.72	1.87	1.87	0.00	12.42	8.17	4.25
	TOTAL	####	####	1569.78	####	3715.99	829.53	6711.04	5701.30	1009.75	####	####	####	685.87	363.76	322.11	####	265.11	####

*** ***