



Annual Report
on
Natural Calamities
2002-03



Special Relief Commissioner
REVENUE DEPARTMENT
Government of Orissa

OSDMA ORISSA STATE DISASTER
MITIGATION AUTHORITY
(A GOVERNMENT OF ORISSA AGENCY)

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on

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Prepared by
Special Relief Commissioner
Revenue Department
Government of Orissa

Orissa State Disaster Mitigation Authority
Bhubaneswar

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1. CALAMITIES

The State of Orissa is prone to multiple hazards. One calamity or another hits the State almost every year. The State, which suffered a severe drought in 1998, was ravaged in 1999, by what is now awfully known as super cyclone. Again, the State faced a drought in 2000 and high floods in 2001. A severe drought occurred during year under report.

More than 80% of the geographical area and nearly 90% of the population are vulnerable to one or more disasters. With more than 66% of the population living below the poverty line, the coping mechanism of the State and its people is constantly under severe strain. Although positive and meaningful steps have been taken to prepare the community against natural disasters, there is hardly any time left to complete the process. Before the preparedness exercise yields any concrete and tangible result, another calamity visits the State, forcing the State to shift its focus from reconstruction to relief and rehabilitation measures.

A decade long story of multiple disasters griping the State is shown at Table-1.

Year	Calamity	Year	Calamity
2002	Drought	1996	Drought
2001	Floods	1995	Floods
2000	Drought	1994	Floods
1999	Super Cyclone	1993	*
1998	Drought	1992	Floods
1997	Drought		

[Table-1]

The major natural calamity that affected the State in 2002-03 was drought. But there were also minor calamities like hail storms and fire accidents which occurred locally. The impacts of these calamities i.e. (a) drought, (b) hailstorm and (c) fire accidents are discussed one after the other.

2. DROUGHT

- A. Type of Calamity : Drought
- B. Time, Date(s) of Occurrence : June, July & August 2002 (Khariff)
- C. Magnitude & Impact : Drought was severest.
- D. Intensity & Magnitude :

Agriculture in Orissa is mainly rain-fed, as only 35% of the cultivated area of 64 lakh hectares in the State has irrigation facilities from various sources, some of which are again dependent on rainfall. The rivers of the State are rain-fed and they receive their runoff mainly from the monsoon rainfall. This year, the monsoon, which was punctual in its arrival, has proved highly erratic in behaviour. The July rainfall, most crucial for Khariff paddy crop, has been 60% less than normal. Not even a single district of the State has received normal rainfall during the crucial month of July. The total rainfall in the State during July was only 140.14 mm against the normal rainfall of 351.60 during the period mm. It amounts to only 40% of the normal average rainfall for the State in the month.

Except Ganjam, Gajapati, Khordha and Koraput every district has experienced 50% or more deficiency in rainfall. Angul district being the worst-hit, received the minimum rainfall, i.e. only 18% of the normal. The combined rainfall deficit in June & July is about (-) 45.66% of the normal. Statistically, it is the lowest rainfall experienced in July during the last 40 years. District-wise break up of July rainfall is given in Table-2.

**STATEMENT SHOWING DISTRICT-WISE RAINFALL (IN MM)
JULY 2002**

Sl. No.	District	Normal	Actual	% of Deviation
1	Angul	382.00	66.76	-82.52
2	Balasore	332.60	116.11	-65.09
3	Bargarh	469.60	103.24	-78.02
4	Bhadrak	332.60	124.94	-62.44
5	Bolangir	391.70	120.61	-69.21
6	Boudh	390.80	126.56	-67.62
7	Cuttack	351.80	182.52	-48.12
8	Deogarh	469.60	85.12	-81.87
9	Dhenkanal	382.00	150.09	-60.71
10	Gajapati	221.60	141.44	-36.17
11	Ganjam	221.60	156.67	-29.30
12	Jajpur	351.80	155.00	-55.94
13	Jharsuguda	469.60	180.18	-61.63
14	Jagatsinghpur	351.80	183.70	-47.78
15	Kalahandi	343.50	121.80	-64.54
16	Kandhamala	390.80	132.75	-66.03
17	Kendrapara	351.80	110.62	-68.56
18	Keonjhar	391.80	115.57	-70.50
19	Khordha	310.80	225.60	-27.41
20	Koraput	351.10	224.51	-36.06
21	Malkangiri	351.10	148.76	-57.63
22	Mayurbhanj	426.40	114.30	-73.19
23	Nawarangpur	351.10	210.16	-40.14
24	Nayagarh	310.80	126.07	-59.44
25	Nuapada	343.50	115.24	-66.45
26	Puri	310.80	120.99	-61.07
27	Rayagada	351.10	132.81	-62.17
28	Sambalpur	469.80	206.88	-55.96
29	Sonepur	391.70	106.39	-72.84
30	Sundargarh	480.20	98.69	-79.45
	STATE	351.60	140.14	-60.14

[Table-2]

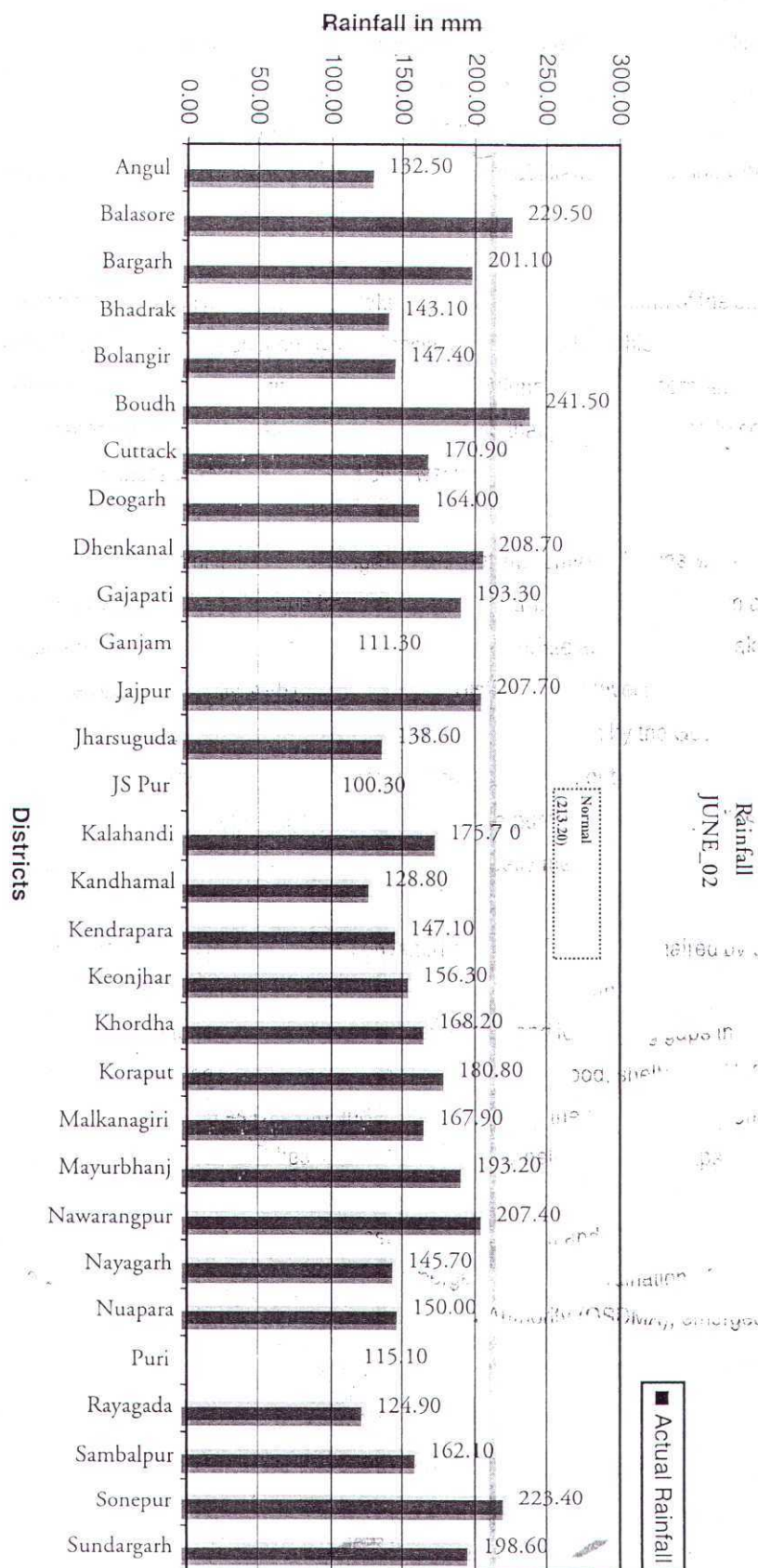
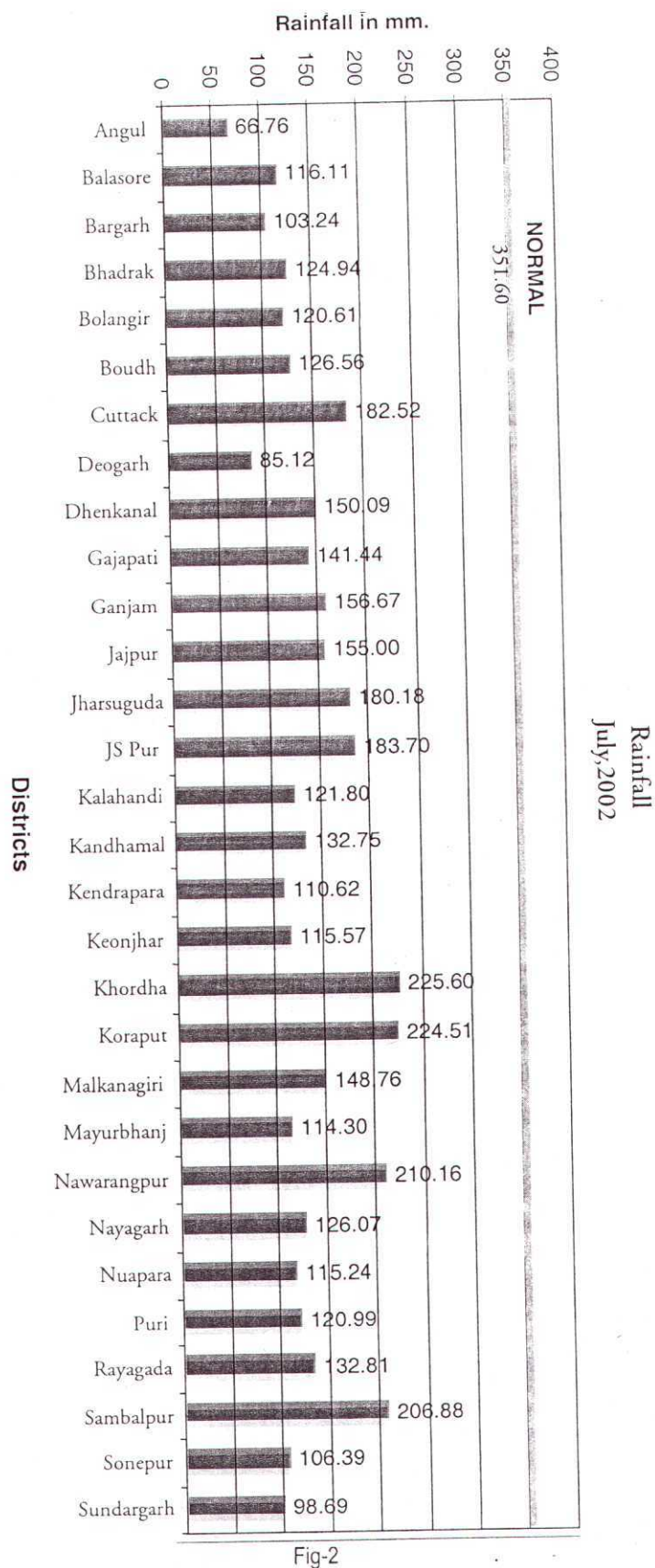


Fig-1



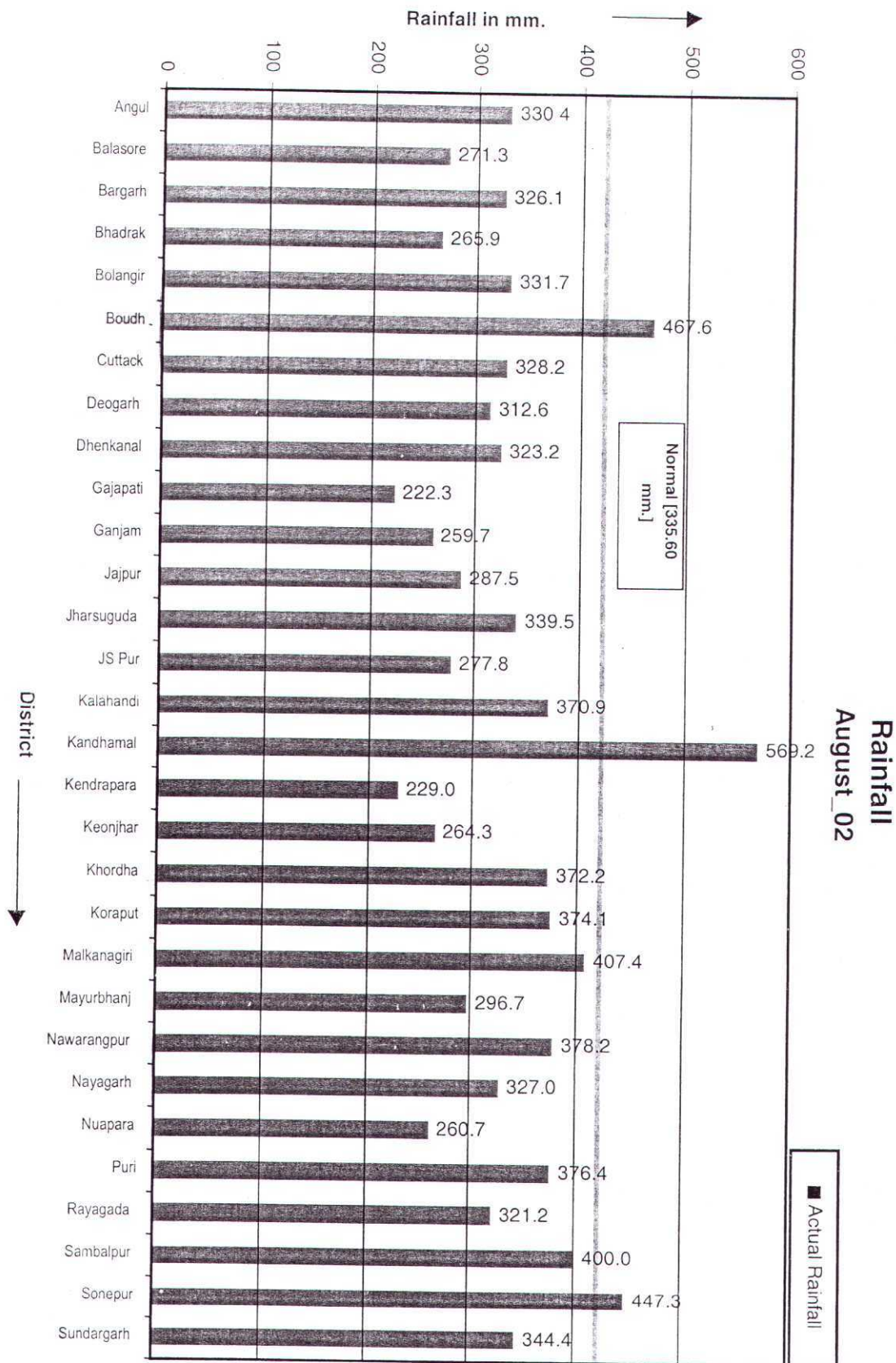


Fig-3

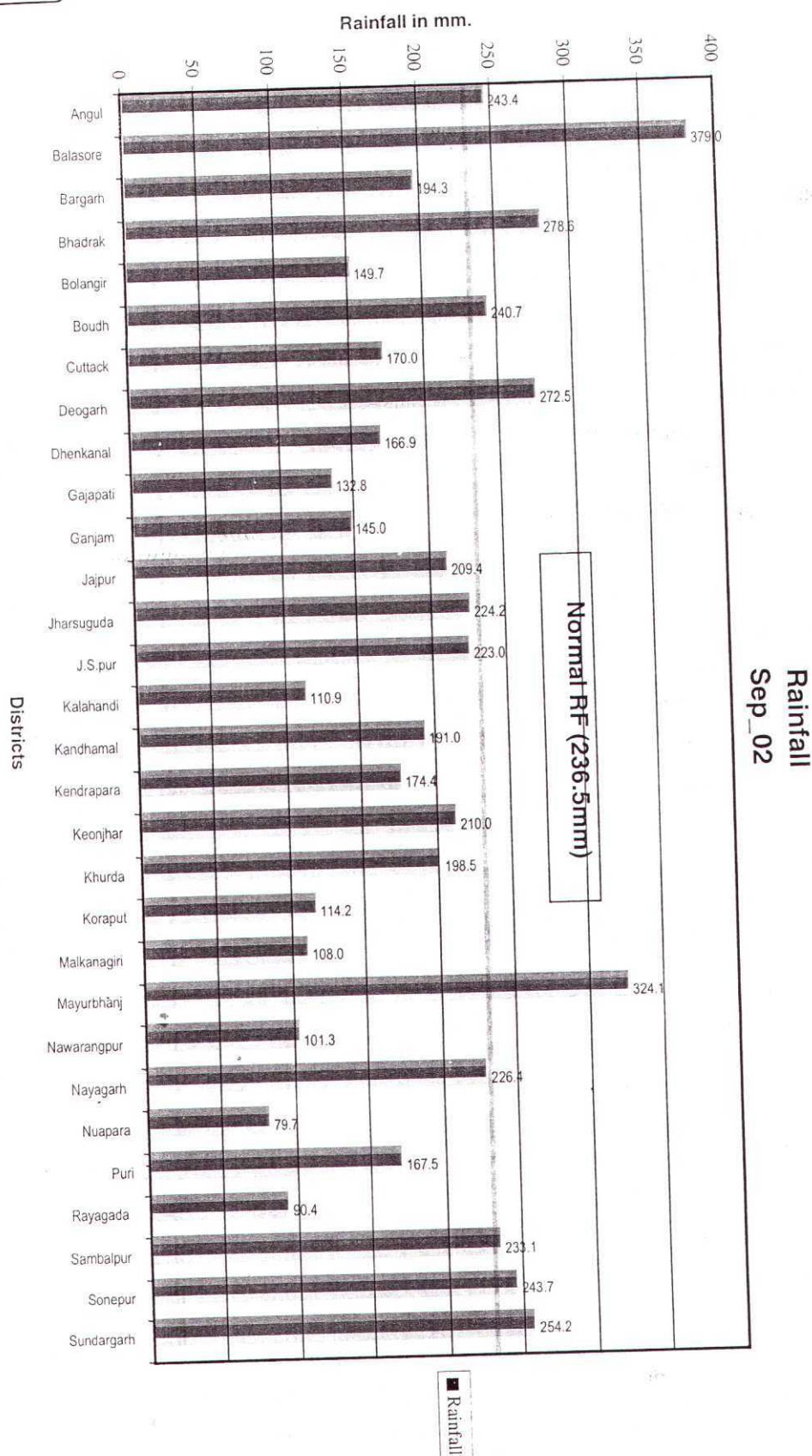


Fig-4

MONSOON-2002 AT A GLANCE

- June Rainfall 20% less than normal
- July Rainfall 60% less than normal
- July rainfall the lowest in last 40 years.
- Not even a single district received normal rainfall in July.
- July rainfall deviation ranges from 82.5% in Angul district to 27.41% in Khordha district.
- August Rainfall though looks normal for the State, the fact remains that 21 districts received less than normal rainfall.
- September Rainfall is again less than 18% of normal rainfall.

The Bar Charts of rainfall deviation for June, July, August & September are shown at Fig-1, Fig-2, Fig-3 & Fig-4 respectively. The table below shows the behaviour of monsoon rain in the State.

Month	Normal	Actual	Deviation
June	213.20	166.80	(-) 21.76
July	351.60	140.14	(-) 60.14
August	335.60	336.10	0.15
Sept	236.50	195.20	(-) 17.50

[Table-3]

As a result, a severe drought occurred throughout State of Orissa.

JULY RAINFALL DURING THE LAST 11 YEARS

July rainfall during the last 11 years shows that whenever there was a deficiency, the drought occurred. On the other hand, excessive rainfall during July resulted in floods. Thus July rainfall is most crucial for the State which makes or breaks the crop. Table-4 corroborates this statement.

JULY RAINFALL

Year	Actual Rainfall in mm	% of Rainfall from Average Normal Rainfall of 351.6 mm	Calamity
2002	140.14	39.86	Drought
2001	588.60	167.41	Floods
2000	249.70	71.02	Drought
1999	244.90	69.65	Super Cyclone
1998	268.10	76.25	Drought
1997	306.40	87.14	Drought
1996	252.60	71.84	Drought
1995	301.70	85.81	Floods
1994	449.30	127.79	Floods
1993	330.50	94.00	No calamity
1992	399.20	113.54	Floods

[Table-4]

E. Population affected : 298.00 lakh.

F. Districts affected : 29 out of 30 districts of the State (except Jagatsinghpur) were affected severely by drought. 32659 villages and 259 wards under 290 blocks and 58 ULBs suffered loss (more than 50%) after the final crop cutting experiment received from Collectors. The Annexure shows the names of affected districts, blocks, ULBS and details of percentage of crop loss.

G. Damages (i) Human Casualty : Nil
(ii) Agriculture

On the basis of the reports received from District Collectors, Revenue Divisional Commissioners, field officials of Agriculture Department and feedback from Water Resources Department, a pre-estimate of the crop loss likely to be suffered by the State had been worked out. In order to gain a first hand knowledge of the field conditions, a high level committee headed by Agriculture Production Commissioner visited the worst hit districts of western Orissa. Table-5 gives the details.

ESTIMATED LOSS

Type of loss	Affected Area (in lakh hecets)	Anticipated (% of loss)	Anticipated loss of prod.(in lakh tonnes)
Fallow lands	7.73	100	13.35
Area affected by Gajamarudi	0.85	100	1.54
Area, where no beushana has been done	19.22	60	19.85
Area transplanted but subject to moisture stress	0.34	60	0.38
Beaushana done but subject to moisture stress.	0.32	50	0.30
Total	28.46		35.42

[Table-5]

The money value of 35.42 LMT of paddy is (23.38 LMT in terms of Rice) estimated to be around Rs.1,877 crore. Paddy production from the normal area of 30.17 lakh hecets. (Up to 31st July) is 52.32 LMT. The percentage of loss in production is 68% [see Table-5]. The impact on agriculture & crop may be summarized as follows.

- | | | | |
|-------|--------------------------------------|---|--------------------|
| (i) | Crop area damaged | : | 28.46 lakh hecets. |
| (ii) | Production affected | : | 12.13 lakh tonnes. |
| (iii) | Value of crop loss in terms of money | : | Rs.1877.00 crore |

H. DROUGHT AMELIORATION MEASURES BY GOVERNMENT

(a) **Protective Irrigation** : An amount of Rs.2.07 crore has been sanctioned out of CRF to the districts affected due to moisture stress to provide protective irrigation to the farmers by constructing cross bundhs, hiring of diesel pump sets and repair of control system of minor projects and repair to water harvesting structures.

(b) **Repair of Lift Irrigation Points** : An amount of Rs. 8.18 crore has been sanctioned in favour of the districts to operationalise the operable LI Points through minor repairs to provide irrigation facilities.

1. Rs 5,000/- was provided to each operable Lift Irrigation Points out of CRF to revive it through Pani Panchayats. It was also decided to extend this facility to LIPs installed by OAIC and ITDAs during Rabi Programme.
2. Further additional Rs. 3000/- had been provided to each LIPs towards maintenance during Rabi-02, thus making Rs. 8,000/- for each point.
3. The assistance out of CRF for Rabi-02 in respect of LIPs revived or operationalised on or after 1.11.02 had been enhanced from Rs. 8,000/- to Rs. 10,000/- on average for a district.

(c) Labour Intensive Works

Govt. of India had committed an allocation of 4.44 lakh MT of food grain as a special component of SGRY for taking up labour intensive work under Food for Work Programme during Drought-02. Out of this, Government of India provided 4.22 lakh MT of food grains. The food grain (Rice) under special component of SGRY was utilized for creation of additional wage employment in the drought affected areas of the State. This food grain was tagged to the ongoing labour Intensive Works or new projects. Rice so allotted was distributed to the labourers @ 6.00/7.00 kg per man day. The issue price fixed by State Govt. is Rs. 5.65 per kg. Thus the amount to be paid in cash to the labourers i.e. Rs. 16.10/10.45 [Rs. 50.00- (Rs. 5.65X6 or 7)] = Rs.16.10 or Rs. 10.45.

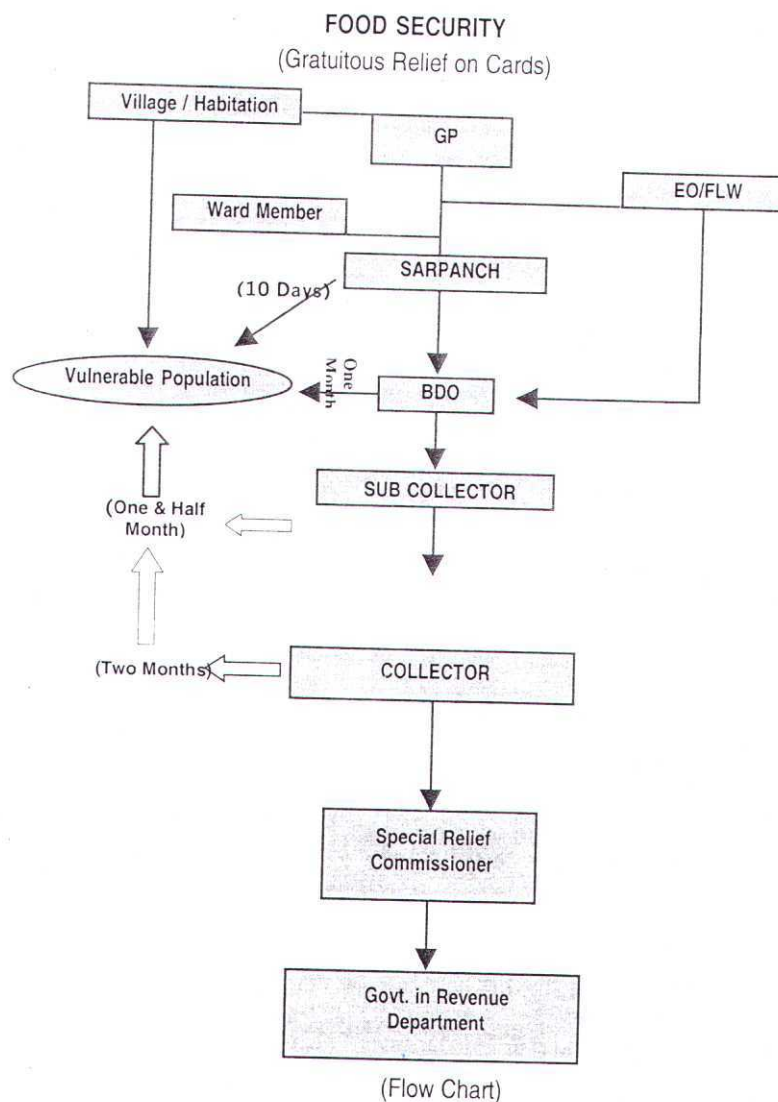
Hence an Rs.74.95 crore (Departments: Rs. 23.74 crore & Districts: Rs. 51.21 crore) out of CRF as matching cash component has been sanctioned and released to Districts/Departments for taking up labour intensive work in order to provide need based employment to the landless agricultural labourers in the drought affected areas. Due to paucity of funds available with various departments the entire burden was borne by CRF corpus fund. A statement showing the details of release of funds on various units for drought mitigation measures to different Districts/Departments as on 30.9.03 is given at Table-6.

Release of Funds for Drought Mitigation Measures 2002-03 & 2003-04 (Till 30th September 03)

Sl. District No.		Labour Intensive Work		Protective Irrigation	Revival of Lift Points	GR in Kind	TC for Food Grains	Emergency Feeding Programme	TOTAL
		Grain in MT	Cash						
1	2	3	4	5	6	7	8	9	10
1	Angul	7942	160.735	8.00	16.35	3.00	20.97		209.06
2	Balasore	9076	183.685	8.00	59.65	2.00	23.97		277.30
3	Bargarh	11345	229.62	8.00	17.40	3.00	29.96	75.55	363.53
4	Bhadrak	4538	91.85	8.00	40.00	2.00	11.98		153.83
5	Bolangir	14211	340.83	8.00	33.00	5.00	36.96	3.48	427.27
6	Boudh	2269	45.915	8.00	7.10	3.00	6.00		70.01
7	Cuttack	10211	206.66	5.00	39.70	2.00	26.96		280.32
8	Deogarh	2269	45.915	8.00	3.95	3.00	6.00		66.86
9	Dhenkanal	5673	114.81	5.00	22.25	2.00	14.98		159.04
10	Gajapati	6623	125.635	8.00	10.28	2.00	18.30	17.39	181.61
11	Ganjam	18933	444.805	8.00	66.95	2.00	48.62		570.38
12	Jagatsinghpur	4538	91.85	5.00	18.80	3.00	11.98		130.63
13	Jajpur	6807	137.77	5.00	59.90	2.00	17.98		222.65

Sl. No.	District	Labour Intensive Work		Protective Irrigation	Revival of Lift Points	GR in Kind	TC for Food Grains	Emergency Feeding Programme	TOTAL
		Grain in MT	Cash						
14	Jharsuguda	2269	45.915	5.00	6.45	2.00	6.00		65.36
15	Kalahandi	10211	206.65	8.00	21.85	5.00	28.71	67.35	337.56
16	Kandhamal	8126	186.415	8.00	6.70	3.00	20.64	7.00	231.76
17	Kendrapara	6807	137.77	8.00	74.00	2.00	17.98		239.75
18	Keonjhar	10026	194.515	8.00	28.45	3.00	27.29	24.14	285.40
19	Khordha	4765	96.44	5.00	28.45	2.00	12.58		144.47
20	Koraput	7807	137.77	5.00	23.70	5.00	17.98		189.45
21	Malkangiri	5765	123.27	5.00	3.30	5.00	14.58	17.37	168.52
22	Mayurbhanj	17202	356.56	8.00	56.45	3.00	44.61		468.62
23	Nawarangpur	4538	91.85	5.00	15.60	5.00	11.98	4.00	133.43
24	Nayagarh	5900	119.41	5.00	17.55	3.00	15.58		160.54
25	Nuapada	7765	203.78	8.00	9.80	5.00	22.33	51.03	299.94
26	Puri	6992	149.905	8.00	31.55	2.00	17.65		209.10
27	Rayagada	10438	211.245	8.00	32.25	5.00	27.56	62.92	346.98
28	Sambalpur	4538	91.85	5.00	12.30	3.00	11.98		124.13
29	Sonepur	4538	91.85	8.00	19.00	5.00	11.98	13.45	149.29
30	Sundargarh	20114	455.595	8.00	35.48	3.00	51.93	1.76	555.76
TOTAL		242236	5120.87	207.00	818.21	95.00	636.04	345.44	7222.56
31	RD	33200	536.63				81.20		617.83
32	Works	4500	67.18				15.75		82.93
33	F& E	8700	114.95				30.45		145.40
34	F& ARD	5800	102.25				4.55		106.80
35	SC & ST	1900	28.36				6.65		35.01
36	Water Resources	99764	1409.99				266.00		1675.99
37	Agriculture	12700	114.95				30.45		145.40
38	UNDP	6500							
39	CARE	6700							
40	RD			Drinking water for cattle				241.00	
41	F& ARD			Fodder for cattle					150.00
42	Agriculture			Input Subsidy					1023.02
43	H & UD and RD	*		Drinking Water					1790.00
44	Health & FW	*		Health Measures					362.75
45	H & UD			Renovation of Tanks					450.00
Grand Total		422000	7495.18	207.00	818.21	95.00	1071.09	345.44	14048.69

[Table-6]



(d) Gratuitous Relief

The impact of drought was mostly felt by small/marginal farmers and landless agricultural labourers (LALs). To ensure food security for those people, Orissa Relief Code provides gratuitous relief in kind to be administered to old, infirm, destitute, lunatic and main bread earner of the family in prolonged illness. Rs. 0.95 crore was given to different districts to provide food materials to them.

Government has delegated power to administer such relief to Sarapanchs for 10 days, BDOs for 30 days, Sub Collectors for 45 days and Collectors for 60 days. The details may be seen in the flow chart on Gratuitous Relief.**

(e) Emergency Feeding Programme

Emergency Feeding Programme initiated in 12 districts namely: Rayagada, Malkangiri, Kalahandi, Nuapada, Bolangir, Gajapati, Kandhamal, Bargarh, Sundargarh, Keonjhar, Nawarangpur and Sonepur. An amount of Rs. 3.45 crore had been released for the purpose in favour of 11 districts. This was initiated for three months from April-03 to June-03 in order to ensure food security for old, infirm, destitute and children facing starvation in most vulnerable areas. The district-wise break up of beneficiaries is shown at Table-7.

Sl. No.	District	No. of Beneficiaries	Period	Amount Released (In lakhs)
1.	Bolangir	1422	3 months	3.48
2.	Sonepur	5416	do	13.45
3.	Kalahandi	13706	6 months	67.35
4.	Nuapada	21000	3 months	51.03
5.	Rayagada	12947	6 months	62.92
6.	Maikangiri	7148	3 months	17.37
7.	Nawarangpur	813	6 months	4.00
8.	Kandhamal	2869	3 months	7.00
9.	Bargarh	31091	do	75.55
10.	Keonjhar	9935	do	24.14
11.	Gajapati	7157	do	17.39
12.	Sundargarh	726	do	1.76
	TOTAL	114230		345.44

[Table-7]

(f) **Input Subsidy to Farmers :** As the Khariff crop was mostly damaged and crop loss was more than 50% in more than 32 thousand villages, quality seeds were supplied to farmers for early Rabi & Rabi crops. Seeds of major crops such as Paddy, Wheat, Moong, Biri, Mustard, etc were supplied at the subsidized rates. The subsidy amounting to Rs. 4.94 crore was met out of CRF for Rabi crop during 2002. Similarly the drought hit farmers were provided with subsidized seeds for Khariff-2003 and the Agriculture Department had been provided with Rs. 5.29 crore for administering such subsidy in supplying quality paddy seeds.

(g) **Drinking Water Supply :** Drinking water scarcity was quite acute in western part of the State due to heat wave and drought conditions. Rs. 10.15 crore had been released out of CRF to Rural Development Department & Rs. 7.75 crore to H& UD Department for making provision of drinking water in drought hit rural as well as urban areas. Further, an amount of Rs. 4.50 crore was provided to Housing & Urban Development Department to excavate/renovate derelict tanks in urban areas to mitigate water scarcity in drought affected urban areas.

(h) **Animal Care:** The animals specifically cattle population were most affected due to severe drought. The water as well as fodder scarcity were mostly felt in high lands and western part of the State. To mitigate the problem the following measures were taken.

1. Rs. 1.00 cr. and Rs. 0.50 cr. had been provided to Fisheries and Animal Resources Department towards procurement of concentrated feed through OMFED and dry fodder for the cattle population in the drought affected areas.
2. Further Rs. 2.41 crore was provided to Rural Development Department towards installation of 524 numbers of tube wells with sump for making provision of drinking water for animals in drought affected areas.

(i) **Health Measures :** Due to drought and severe heat wave conditions human population encountered a no of health hazards. To mitigate such health hazards Rs. 3.63 crore was provided to Health & Family Welfare Department for providing medicines, ORS etc.

(j) **Transportation Charges :** For transportation, handling and other incidental charges of food grains, Rs. 10.71 crore has been released in favour of districts (Rs. 6.36 cr.) and departments (Rs. 4.35 cr.) @ Rs 35.00 per quintal.

3. HAILSTORM

Incidents of hail storm/ cyclonic storm had also occurred during the year 2002-03 in 12 districts i.e. Cuttack, Sambalpur, Sundargarh, Angul, Deogarh, Bhadrak, Balasore, Ganjam, Dhenkanal, Kalahandi, Mayurbhanj and Jajpur, which are localized in nature. Table-8 shows the details of occurrence and amount of assistance provided.

HAILSTORM / WHIRL WIND & CYCLONIC WIND: 2002-03

Sl. No.	Name of the District	Date of Occurrence	Name of the block affected	No. of villages affected	Casualty / Injured	Amount of property damaged (In lakh)	Assistance
1	Angul	2 & 11.04.02	Angul, Talcher	123	Nil	622.21	72.29
2	Cuttack	20.02.03	Baramba, Niali	7 / 27	*/50	100.99	2.00
3	Sambalpur	18.02.03 / 28.02.03 / 13.03.03	Sambalpur		Nil	1.00/ 200.00/ 3.30	
4	Sundargarh	05.02.03	Kohira		Nil		0.257
5	Deogarh	13.03.03	Reamal		Nil		0.862
6	Bhadrak	12.11.02	Basudevapur		3	-	1.50
7	Balasore	27.03.02 / 06.05.02	Baliapal, Jaleswar, Balasore		Nil		
8	Ganjam	11.04.02	Polsara, Kodala & Kabisuryanagar		Nil		
9	Dhenkanal	11.04.02 / 12.04.02	Parjanga, Kamakhyanagar	1 / 1	Nil		
10	Kalahandi	12.04.02	Lanjigarh	9	Nil		
11	Mayurbhanj	06.05.02	Baripada	7	Nil		
12	Jajpur	20.02.03	Jajpur & Binjharapur	47	Nil		

[Table-8]

4. FIRE ACCIDENTS

Fire accident is a frequent phenomenon in rural areas during summer. Most of the houses and household properties of poor men usually get gutted due to accidental fires. Table -9 gives the details of loss of life and property due to fire accident during 2002-03.

FIRE ACCIDENTS

Sl. No.	District	No. of fire accidents	No. of villages affected	No. of houses gutted	No. of families affected	No. of casualty		Approximated loss of property (Rs. in lakh)	Relief assistance provided (Rs in lakh)
						Human	Cattle		
1	Angul		353	956	816	3	1	81.928	4.705
2	Balasore	493	449		614			114.146	5.349
3	Bargarh	9	16	29	22			0.250	0.068
4	Bhadrak	298	59	806	674			138.937	6.583
5	Bolangir		55	234	221			10.294	4.339
6	Boudh	120	120	792	700		6	67.277	5.918
7	Cuttack	442	0	1078	854			85.126	3.955
8	Deogarh		3	3	35	1		3.780	0.024
9	Dhenkanal	220	220	516	741			79.140	8.530
10	Gajapati	103	66	92	222		3	18.008	3.097
11	Ganjam	537	504	0	828	1		283.615	18.609
12	Jajpur	281	407	74	25			90.155	3.164
13	Jharsuguda	18	18	8	25			3.598	0.150
14	Jagatsinghpur		230	703	352			50.491	4.909
15	Kalahandi	34	34	29	41			2.058	0.278
16	Kandhamal	159	159	111	187			20.390	1.466
17	Kendrapara	506	396	159	643			82.257	4.248
18	Keonjhar	296	199	353	115			33.478	2.393
19	Khordha	282	282		1184			95.057	5.126
20	Koraput	259	214		278	3		15.229	0.750
21	Malkangiri		62	91	91			1.634	0.331
22	Mayurbhanj	428	284	203	514	1	28	78.919	2.967
23	Nawarangpur	96	95	39	119			6.989	0.453
24	Nayagarh	234	234	696	1489		2	93.544	12.573
25	Nuapada	28	23	5	29	1		2.324	0.190
26	Puri	324	324	409	714	1	14	90.389	4.980
27	Rayagada		37	664	658	2		132.901	18.912
28	Sambalpur	73	61	70	101			7.953	0.416
29	Sonepur	8	271	244	15			27.030	2.081
30	Sundargarh	4	4	4				0.455	
	Total	5252	5179	8368	12307	13	54	1717.35	126.56

[Table-9]

Assistance provided out of CRF for the victims of Fire Accidents & Hailstorms

Rs in lakh

Sl. No.	District	Fire Accident		Hail storm HB Assistance
		Ex-Gratia	HB Assistance	
1	2	3	4	5
1	Angul	0.20	2.43	72.29
2	Balasore			
3	Bhadrak	0.70	3.82	
4	Baragarh	0.40		
5	Bolangir	0.30	3.68	
6	Boudh	0.40	11.84	
7	Cuttack	2.10	6.99	2.0
8	Dhenkanal	1.60	14.55	
9	Deogarh	1.00	0.50	
10	Ganjam		20.00	
11	Gajapati			
12	Jaipur	0.30	14.63	
13	Jagatsinghpur	1.30	4.32	
14	Jharsuguda	0.30	0.19	
15	Kalahandi	0.50		
16	Kandhamal		1.50	
17	Keonjhar	1.20	4.00	
18	Khordha	0.90	5.13	
19	Kendrapara	1.70	5.00	
20	Koraput	1.00		
21	Mayurbhanj	3.60	2.00	
22	Malkangiri		2.00	
23	Nayagarh	0.78	9.00	
24	Nuapada	0.90		
25	Nawarangpur	0.90		
26	Puri	1.10	2.40	
27	Rayagada		12.12	
28	Sambalpur	0.60		
29	Sonepur	0.40	4.70	
30	Sundargarh	1.20		
	Total	23.38	130.79	74.29

[Table-10]

5. ASSISTANCE SOUGHT FROM GOVERNMENT OF INDIA

The State Government submitted a Memorandum requesting assistance of Rs. 871.40 crore and 12.19 lakh MT of food grains in different sectors to mitigate the impact of drought. Table-11 gives the details.

ASSISTANCE SOUGHT FROM GOVERNMENT OF INDIA

Sl. No.	Sector-wise Interventions	Amount (Rs. in crore)	Food Grain (In LMT)
1.	Agriculture (Seed and other inputs)	10.00	
2.	Agriculture Credit (Crop loan and Insurance)	61.00	
3.	Food security (GR, SNP, EFP)	38.39	
4.	Employment Generation	514.56	10.16
5.	Drinking Water Supply (Rural + Urban)	58.78	
6.	Health Measures	2.75	
7.	Immediate Irrigation Measures	17.86	
8.	Water Resources Management	110.30	2.00
9.	Fisheries and Animal Resources Welfare Measures	52.55	0.03
10.	Sericulture	3.21	
11.	Exemption of Fees (Tuition and Examination)	2.00	
	TOTAL	871.40	12.19

[Table-11]

As against the above demand during Drought-02, the State Government received a sum of Rs. 21.84 crore as assistance from Government of India out of NCCF, which included Rs.5.29 crore for input subsidy to farmers in drought affected areas, Rs.16.41 crore for air lifting charges for Floods-2001 and Rs.0.14 crore for railway transportation charges for carrying fodders and drinking water. Further GOI had provided 4.22 Lakh MT of Food Grain under FFW programme in four phases since October-2002 till June-2003.

6. CRF POSITION

At the beginning of the year, 200-03 the unspent balance under CRF/NFCR/NCCF was Rs. 170.29 crore. Besides an amount of Rs. 142.39 crore was received as corpus fund under CRF and grants under NCCF. Thus the total amount available during the year 2002-03 for expenditure under different calamity mitigation measures was Rs. 312.68 crore.

Out of the above amount a sum of Rs. 253.00 crore was released for expenditure towards relief and restoration works pertaining to different calamities during the year. After meeting the above expenditure Rs. 59.68 crore remained unspent at the end of the year. Table-12 shows the position of Calamity Relief Fund.

Position of Calamity Relief Fund : CRF / NFCR / NCCF (As on 31.03.03)

Rs in lakh

Sl. No.	Scheme	Amount Available			Amount Released			Balance
		Opening Balance	Grants Received	Total	Departments	Districts	Total	
1	CRF(02-03)	3402.95	12069.00	15471.95	3853.43	6383.40	10236.82	5235.13
2	NFCR (Cyclone-99)	5785.39	*	5785.39	5485.65	288.90	5774.55	10.84
3	NCCF (Drought-00)	1726.55	*	1726.55	1426.43	300.00	1726.43	0.12
4	NCCF (Flood-01)	6114.61	*	6114.61	5832.39	89.50	5921.89	192.72
5	NCCF (02-03)	*	2170.00	2170.00	1640.51	*	1640.51	529.49
	Total	17029.50	14239.00	31268.50	18238.40	7061.80	25300.20	5968.30

[Table-12]

District and Department-wise break up of amount released with purpose is shown at Table-13 & Table-15 and Table-14 & Table-16 respectively.

Amount in Lakhs

Sl. No.	District	Amount Released	Sl. No.	District	Amount Released
1	Angul	605.665	16	Kandhamal	175.060
2	Balasore	219.700	17	Kendrapara	228.240
3	Bargarh	291.890	18	Keonjhar	264.770
4	Bhadrak	157.064	19	Khordha	153.614
5	Bolangir	368.790	20	Koraput	171.260
6	Boudh	92.880	21	Malkangiri	140.280
7	Cuttack	251.320	22	Mayurbhanj	409.060
8	Deogarh	76.960	23	Nawarangpur	103.750
9	Dhenkanal	164.950	24	Nayagarh	133.890
10	Gajapati	139.170	25	Nuapada	268.830
11	Ganjam	638.720	26	Puri	222.763
12	Jajpur	276.248	27	Rayagada	262.988
13	Jharsuguda	52.480	28	Sambalpur	95.960
14	Jagatsinghpur	114.941	29	Sonepur	112.805
15	Kalahandi	408.610	30	Sundargarh	459.142
				TOTAL	7061.800

[Table-13]

Sl. No.	Department	Amt. Released	Sl. No.	Department	Amt. Released
1	Health & Family Welfare	0344.350	11	Food Supply & CW	1.778
2	Women & Child Welfare	55.500	12	Agriculture	1150.070
3	Works	2041.530	13	Industries	16.206
4	Rural Development	4273.770	14	Forest & Environment	355.00
5	Water Resources	4850.960	15	Tourism & Culture	52.900
6	School & Mass Education	50.000	16	ST & SC Dev.	382.680
7	Commerce & Transport	34.630	17	OSDMA	870.000
8	Higher Education	53.290	18	Under Secretary (SR)	1810.032
9	Housing & Urban Dev.	1161.024	19	Other DDOs	183.617
10	Fisheries & ARD	551.063		Total	18238.400

[Table-14]

Sl	District	Total Of Allotment	Buildings	EFP	Emergent Relief	Ex Gratia	GR In Kind	HBA	Labour Intensive	LIP	Other Items	PI	Roads	Sand Cast	School	TC	Temporary Shelter	ULB
1	Angul	605.66525	128.52			0.20	3.00	265.32525	122.09	16.35	0.08	8.00		52.00		10.10		
2	Balasore	219.70					2.00		139.53	59.65	0.12	8.00				10.40		
3	Bargah	291.89		75.55		0.40	3.00		174.42	17.40	0.12	8.00				13.00		
4	Bhadrak	157.0636				4.60	2.00	3.82	69.77	40.00	7.75	8.00		0.3736	15.55	5.20		
5	Bolangir	368.79		2.49		0.30	8.33	3.68	291.15	33.00	0.14	8.00				21.70		
6	Boudh	92.88				0.50	3.00	12.00	34.88	7.10	0.05	8.00	7.25	17.37		2.73		
7	Cuttack	251.32	3.90		1.00	2.10	2.00	10.00	156.98	39.70	0.14	5.00		8.30		22.20		
8	Deogarh	76.96	23.00			1.00	3.00	0.50	34.88	3.95	0.03	8.00				2.60		
9	Dhenkanal	164.95	23.00			3.05	2.00	15.84	87.21	22.25	0.08	5.00				6.52		
10	Gajapati	139.17		17.39			9.72		87.21	10.28	0.07	8.00				6.50		
11	Ganjam	638.72	85.00				2.00	30.00	378.35	66.95	0.22	8.00				28.20		40.00
12	Jagatsinghpur	114.9408				1.30	2.0086	4.315	69.77	18.80	0.08	5.00		8.4672		5.20		
13	Jajpur	276.24752	48.68			0.30	2.0142	14.629	104.65	59.90	0.28	5.00		29.7984		7.99592		3.00
14	Jharsuguda	52.48				0.30	3.00	0.200	34.88	6.45	0.05	5.00				2.60		
15	Kalahandi	408.61		33.30		1.50	5.00		156.97	21.85	0.13	8.00		170.16		11.70		
16	Kandhamal	175.06		5.81			3.00	1.50	139.53	6.70	0.12	8.00				10.40		
17	Kendrapara	228.24				1.70	2.00	5.00	104.65	74.00	0.09	8.00				7.80		25.00
18	Keonjhar	264.77	30.00	24.14		1.30	3.00	4.00	139.53	28.45	0.95	8.00		15.00		10.40		
19	Khordha	153.614	8.50			1.65	2.00	5.94078	73.25	28.45	0.64675	5.00		22.7666		28.17647		
20	Koraput	171.2596				2.00	5.00		104.65	23.70	0.14	5.00				8.003		
21	Malkangiri	140.28		17.37			5.00	2.00	100.08	3.30	0.07	5.00				7.460		
22	Mayurbhanj	409.06	31.95			4.10	3.00	5.43	279.07	56.45	0.26	8.00				20.80		
23	Nawarangpur	103.75		1.98		1.10	5.00		69.77	15.60	0.10	5.00				5.20		
24	Nayagarh	133.89				1.80	3.00	9.00	90.70	17.55	0.08	5.00				6.76		
25	Nuapada	268.83		51.03		0.90	5.00		180.59	9.80	0.05	8.00				13.46		
26	Puri	222.76347	25.00			3.40	2.00	3.5945	122.09	31.55	0.11	8.00		6.95682		20.06215		
27	Rayagada	262.988		31.46			5.00	12.12	160.46	32.25	0.11	8.00				11.96	1.628	
28	Sambalpur	95.960				0.60	3.00		69.77	12.30	0.09	5.00				5.20		
29	Sonepur	112.805				0.55	5.00	5.225	69.77	19.00	0.06	8.00				5.20		
30	Sundargarh	459.1422		1.76		1.20	3.00	0.627	378.35	35.48	0.17	8.00		2.3552		28.20		
	TOTAL	7061.79944	407.55	262.28	1.00	35.85	106.0728	414.74853	4025.00	818.21	12.38675	207.00	7.25	333.54782	15.55	345.72754	1.628	68.00

Sl.	Dept.	Total Allmnt	Air Lifting (Flood-01)	Breach (Flood-01)	Bldgs	CDR	Colg Bldng	Drnkng Water	EFP	Elect of SPE st	Eqpmnts & Trng	FDR	FFW (Saranalla)	FMD & BQ Vac.	Foot Bridge	Gopalpur Port	Heat Wave	Input Subsidy	Jetty Repr	Liabl 80 Schls	Liabl Rds
1	Agriculture	1150.07											60.73					1029.34			
2	Commerce	34.63														22.83					
3	F & ARD	551.06329			77.06								50.00	200.31714					223.68615		
4	Food & CW	1.77774																			
5	Forest	355.00											350.00								
6	H & FW	344.35			45.00																
7	Higher Education	53.290			22.00		17.69														
8	HUD	1161.024			90.00			550.00				128.03					97.00				
9	Industry	16.20626																			
10	OSDMA	870.00									670.00										
11	Other DDOs	183.61768																			
12	RD	4273.77			487.15			765.00					250.00							109.85	500.00
13	School & Mass	50.00			24.00																
14	SCST Dev.	382.68											190.33								
15	Tourism & Culture	52.90																			
16	US (SR)	1810.03271	1640.50833																		
17	Water Resources	4850.96		262.45	20.00	429.92							3439.19	20.40	127.00				200.00	342.00	
18	WCD	55.50							55.50												
19	Works	2041.53023			130.77					0.09823											553.00
	TOTAL	18238.4019	1640.50833	262.45	895.98	429.92	17.69	13.15	55.50	0.09823	670	128.03	4340.25	20.40	200.31714	127	97	1029.34	423.68615	342	1053

Sl. No.	Dept.	Liability	Manjga -Eism Rd	MKCG Med Col	MKCG (PH)	Mbl Van	OSIC	Other Items	Palasuni WTP	Panth Nivas	Pintn	POL & TC	Purch of Pwr Bt	Rep of Boats	Roads	Roads (6 ULB)	Sainik Schol	SCB Med Col	Sch/Sch Bldg (MBJ)	Search & Rescue	TC	
1	Agriculture										10										50	
2	Commerce													11.80								
3	F & ARD																					
4	Food & CW							1.77774														
5	Forest										5											
6	H & FW																	299.35				
7	Higher Edn										13.60											
8	HUD								99.124							186.87	10					
9	Industry						16.20626															
10	OSDMA														200							
11	Other DDOs																			183.61768		
12	RD	142.68				111									1908.09							
13	School & Mass																		26			
14	SCST Dev.																		192.35			
15	Tourism & Cul									52.90												
16	US (SR)							9.4249				2	76.69915	20.39957						56.339	4.66176	
17	Water Res														10							
18	WCD																					
19	Works		316.135	23.58	29.647										975				13.30			
	TOTAL	142.68	316.135	23.58	29.647	111	16.20626	11.20264	99.124	52.90	28.60	2	76.69915	32.19957	3093.09	186.87	10	299.35	218.35	13.30	239.95668	54.66176

7. UTILIZATION POSITION

During the Year, 2002-03 Utilization Certificate for a sum of Rs.622.77 crore was sent to AG Orissa. The break up is as follows:

		Rs in crore
CRF	-	160.75
NCCF/NFCR	-	462.02
TOTAL	-	622.77

The progressive utilization submitted till 31.03.03 against the allotment since super cyclone is Rs.928.24 cr.

8. MANAGEMENT INFORMATION SYSTEM

A Management Information System has been introduced from 15.01.03 for tracking hunger and malnutrition in the State by obtaining information from grass root level each fortnight. The indicators give feed back from the field to plan and design interventions as and when necessary to ensure food security among the vulnerable people. The abstract of Indicators are shown at Table-17.

FORMAT-S

State-Orissa

Fortnight Ending: _____

Sl.No.	Indicators	Parameters	No./Qty
1.	Employment Generating Work	No. of Job Seekers (AL & MF) for wage employment Without Work	
2.	Food For Work	Availability of allotted Food Grain	
3.	Public Distr. System	No. of Retail Out-let Points not lifted the Stock	
4.	Annapurna Yojana	No. of Families not lifted the entitlement	
5.	Antodaya Anna Yojana	No of Families not lifted the entitlement (APL/BPL)	
6.	Supplementary Nutrition Programme	No. of ICDS centres not running. % of Grade-III & IV Children to Total Children Present Coverage/ Further Requirement	
7.	Mid Day Meal	No. of Schools with Cooked Food/ Dry Ration No. of Schools where MDMP stopped/since when	
8.	EFP	Ongoing/ Immediate Requirement, if any	
9	Social Security Net	No. of Pension Holders not received Pension No. of destitute in dire need of Pension	
10	Gratuitous Relief	No. of GR Card Holders-10days/1month/2month	
11	Health Care	Epidemics if any. (Type)	
12	Disease Victims	Deaths in the last fortnight (Malaria/ Diaphorrea)	
13.	Prolonged Illness	No. of Main Bread Earner of the Family in Prolonged Illness.	
14.	Safe Drinking Water	No. of Habitations without Safe Drinking Water	
15.	Forced Migration	Persons Forced to Migrate	
16.	Food Grain (Rice)	Present Market Price per KG. (Range)	
17	Ground Water	Deviation of the water level of the Wells and Ponds from normal level for the period.	

I do hereby certify that the above information furnished by me is true to best of my knowledge.

Signature of Special Relief Commissioner

[Table-17]

9. MISCELLANEOUS

(a) Disaster Mitigation Equipment

Various equipments have been procured by OSDMA to mitigate the impacts of disasters. These equipments have been handed over to the units of Orissa Disaster Rapid Action Force stationed at Cuttack, Jharsuguda and Koraput. Table-18 shows the list of materials procured during the year.

Sl	Equipment Procured	Qty
1	Hydraulic Crane 12 Ton Capacity	8
2	Tata Truck (6-Ton Capacity) Troop Carrier	10
3	Tata Truck 12 Ton capacity	4
4	Generator 5KVA	9
5	Generator 10KVA	6
6	Concrete Cutting Machine	2
7	Power Saw with Portable Power Unit	6
8	Tree Pruner-cum-Chain Saw	8
9	Water Filter Portable	20
10	Ramp (Fabricated M.S) 2 Ton Capacity	16
11	Telescopic Aluminium Ladder (40ft)	20

Sl	Equipment Procured	Qty
12	Life Jacket	100
13	Life Buoy	100
14	Chain Power Saw (Still 026 Model)	4
15	Tractor with Trailer	4
16	Inflat Rubber Dinghies with OB Motors(W)	20
17	Branch Cutting Saw (Motor Drive)	3
18	Inflat Tower Lighting System with Generator	6
19	Gas Mask with Chemical Cartridge (W)	65
20	Branch Cutting Saw	6
21	Commando Search Light	10
	& 4 Infra-red	

[Table-18]

Funds amounting to Rs. 6.70 crore have been provided out of CRF for procurement of these equipments. User Manual and Maintenance Practices have also been developed for smooth operation of the same.

FUNCTIONING OF COMMUNICATION SYSTEMS

1. **Strengthening of District Control Rooms** : The District Emergency Control Rooms of 11 districts (Cuttack, Puri, Jagatsinghpur, Kendrapara, Jajpur, Bhadrak, Balasore, Mayurbhanj, Ganjam, Sambalpur & Rayagada have been strengthened with communication gadgets (Computer, FAX, Generator, VHF etc). The Control Rooms of the remaining 19 districts are being strengthened by OSDMA.

2. **VHF Communication Systems** : An exclusive civil VHF network connects SRC, OSDMA, Revenue Control Room and 22 districts covering District Control Rooms, ADMs, Sub-Collectors, Blocks, Tahasils, and some inaccessible GPs. The other districts are being covered. The equipment is kept in working condition, if necessary with battery back up and with staff on duty round the clock during the cyclone season. In addition to the above systems, existing police wireless systems can be used for receipt and dissemination of information during cyclones..

3. **Satellite Phones** : 22 satellite phones have been procured and the same are available with Special Relief Commissioner, Revenue Control Room, 16 District Collectors (Cuttack, Puri, Jagatsinghpur, Kendrapara, Jajpur, Bhadrak, Balasore, Mayurbhanj, Sambalpur, Ganjam, Rayagada, Nawrangpur, Malkangiri, Nuapada, Sundargarh, Angul). Two satellite phones are with OSDMA (Fixed with Provident Antenna) and there are two vehicles equipped with mounted voyager antenna with Inmarsat Terminals

The Collectors of the above districts have been instructed to keep the batteries of the Sat phones in charged condition and to make test calls to OSDMA on the 1st working day of every month. Table-19 gives information on location of VHF base stations and location of satellite phones.

Location of VHF Base Stations / Satellite Phones

District/station	No. of Base Stations/ Mobiles	No. of Handsets	Sat Phone ISN No.	Sat Phone ID No.
Jagatsinghpur	10-base stations, 1-vehicle mobile	2	76EB51692A7E	762834535
Kendrapara	12- base stations	2	76EB51631E16	762834567
Bhadrak	08- base stations, 01-vehicle mobile	2	76EB51B98ID5	762834559
Cuttack	10-base stns, 03-temp base, 01-vehicle mobile	2	76EB51B02691	762834539
Nayagarh	07-base stations	2		
Balasore	15-base stations	2	76EB516B4064	762834555
Jajpur	09-base stations, 01-80ft height base station	2	76EB51FC8489	762834563
Puri	12-base stations	2	76EB5151ED5B	762834543
Ganjam	14-base stations, 01-80 ft height base station	2	76EB51B2F112	762834551
Sambalpur	05-80 ft height base stations	2	76EB51BDEF30	762834547
Deogarh	02-80 ft height base stations	2		
OSDMA	01 base station without tower 01-mobile base station, 02 vehicle mobiles	15	76EB53556378 76EB5366ECF7	762882444 762882448
AIR, Cuttack	01-base station without tower			
IMD, BBSR	01-base station without tower			
SRC Office Cuttack	01-base station without tower, 01-vehicle mobile			
SRC Office, BBSR	01 base station without tower	3	76EB5147BC2D	762834571
Rev. Control Room	01 base station without tower		76EB51ACF69C	762834531
ODRAF unit, Cuttack	01-base station without tower			
Boudh	4-80 ft height tower	2		
Sonepur	4-40 ft height tower, 2-80 ft height tower	2		
Kandhamal	4-80ft height tower	2		
Mayurbhanj	7-80 ft height tower	2	76EB51AD1E82	762834587
Jharasuguda	3-80 ft height tower			
Dhenkanal	3-80 ft height tower			
Keonjhar	6-80 ft ht. tower			
Sundargarh	3-80 ft ht. tower		76EB51E7C72B	762834595
Kalahandi	7-80 ft height tower	2		
Malakanagiri	8-80 ft height tower		76EB5120E358	762834575
Khurda	Own VHF network			
Angul			76EB513370FE	762834599
Nawarangpur			76EB51A7FI0D	762834583
Nuapada			76EB51AECB5	762834579
Rayagada			76EB51AF5DC5	762834613
Voyager			76EB54EE2457 76EB544FDCEB	763096440 763096444

[Table-19]

Total-165 base stns out of 230, 08 vehicle mobiles out of 20 (01 each with RDC, North division and RDC, South division).
 Installation of VHF station at 25 locations of Nowrangpur, Koraput, Bolangir are under progress; 50- handsets out of 100.
 Satellite phones are allotted to Collectors in respect of districts.

4. **Free Power Radio** : 60 Phillips-make radio sets have been procured. The sets are available with SRC's Cell Office, Revenue Control Room, 11 Multipurpose Cyclone Shelters of Ganjam district; 47 radios are being provided to 47 MCSs (11-Puri, 4-Jagatsinghpur, 11-Kendrapara, 11-Bhadrak, 10-Balasore).

5. **Wireless in Local Loop (WLL) Phones** : 02 (1- installed in OSDMA & 01-Installed in SRC's cell office)
The WLL phone numbers are : 2600999-SRC's Cell Office ; 2000888-OSDMA

c. Multi-Purpose Cyclone Shelters (MCS) :

1. 98 MCSs (60 with CMRF & 38 with World Bank assistance) are being constructed within 10 kms of the high tide level of Bay of Bengal covering six coastal districts. Construction of 54 (51 of CMRF and 3 of World Bank) has been completed. 42 Cyclone Shelter Management and Maintenance Committees have been constituted.

2. Indian Red Cross Society had constructed 23 MCSs with German KFW funds prior to super cyclone in six coastal districts. After the super cyclone, Indian Red Cross Society has also constructed 4 multipurpose cyclone shelters with Spanish Red Cross funds in Bramhagiri and Krushnaprasad blocks of Puri district. They have a proposal to construct 30 more MCSs in the districts of Balasore, Bhadrak and Kendrapara.

3. Besides the above, about 1183 primary schools (863 double storied) and 959 high schools buildings have been constructed in cyclone affected districts. Most of these buildings have been designed to serve as cyclone shelters.

d. Cyclone Warning Dissemination Systems (CWDS) :

IMD has installed 35 CWDS stations in 8 coastal districts for dissemination of cyclone related warnings.

e. Disaster Risk Management Programme (DRM) :

To institutionalize Disaster Preparedness at different levels, Disaster Risk Management (DRM) programme is being implemented in 103 blocks of eleven districts; Angul, Balasore, Bhadrak, Jajpur, Jagatsinghpur, Kendrapara, Khordha, Cuttack, Rayagada and Ganjam districts in the first phase.

f. Awareness Programme

- ✓ OSDMA publishes two quarterly newsletters : *The Response* in English and *Prastuti O Punarnirman* in Oriya.
- ✓ IEC materials such as posters, pamphlets, etc, are prepared and distributed in the vulnerable areas.

g. National Day for Disaster Reduction

- ✓ National Day for Disaster Reduction and the State Disaster Preparedness Day was observed throughout the State on 29th October 2002. Essay and painting competitions, padayatras, rallies public meetings, street plays and exhibitions were organised in all blocks, district headquarters and the state capital.
- ✓ Disaster Management Plan of Ganjam and Cuttack districts were adjudged two best plans. Volunteers were honoured at district and state levels for the service they rendered during Floods-2001.
- ✓ Disaster Mitigation Equipment procured were displayed and mock drills were organised. School and College students, NGOs and PRI members actively participated in observance of the day.

h. Training

OSDMA organised workshops and training programmes for capacity building of the officials at state / district / block level involving Panchayati Raj Institutions and NGOs in disaster management.

1. Divisional level workshop on "Towards Effective Disaster Management" was organised by OSDMA in collaboration with OXFAM for promoting of a culture of prevention and preparedness. Collectors/ADMs/ PD, DRDAs/ Sub Collectors/ BDOs/ Tahasildars have attended the workshop.

2. A three day orientation programme on disaster management for the NSS Programme Coordinators was organised at Utkal University, Bhubaneswar.
3. Training programmes on Disaster Risk Management for block level officials were organised at SIRD.
4. Training on First Aid and Search & Rescue were organised in DRM programmed districts.
5. Workshop for sensitizing Cyclone Shelter Management Committee members was organized in Ganjam district.
6. Training of Trainers was organized for high school and primary school teachers in Ganjam district.

8. Strategies & Interventions for Mitigation of Impact of Drought

➤ Food Security

- | | |
|---|---|
| <input checked="" type="checkbox"/> Availability | <input checked="" type="checkbox"/> Opening of Grain Banks for tribals |
| <input checked="" type="checkbox"/> Strengthening the PDS | <input checked="" type="checkbox"/> Annapurna and Antodaya Anna Yojana in place |
| <input checked="" type="checkbox"/> PRI in PDS | |
| <input checked="" type="checkbox"/> Decentralized Godowns | |
| <input checked="" type="checkbox"/> Identification of Vulnerability | <input checked="" type="checkbox"/> Gratuitous Relief Cards |
| <input checked="" type="checkbox"/> Emergency Feeding Programme | <input checked="" type="checkbox"/> Empowering Gram Panchayats to address hunger and starvation |
| <input checked="" type="checkbox"/> Empowering Gram Panchayats to address hunger and starvation | |

➤ Wage Employment

- | | |
|--|---|
| <input checked="" type="checkbox"/> Identification of Targeted Group | <input checked="" type="checkbox"/> Drought Proofing Works |
| <input checked="" type="checkbox"/> Prevention of Forced Migration | <input checked="" type="checkbox"/> Creation and Renovation of Water Bodies |

➤ Protective Irrigation

- | | |
|--|--|
| <input checked="" type="checkbox"/> Immediate Irrigation (Cross bundh) | <input checked="" type="checkbox"/> Subsidizing of Hiring of Pumps |
| <input checked="" type="checkbox"/> Operationalisation of LI Points | |

➤ Agriculture Sector

- | | |
|--|--|
| <input checked="" type="checkbox"/> Crop Insurance | <input checked="" type="checkbox"/> Input Subsidy for Rabi Crops |
| <input checked="" type="checkbox"/> Alternative Cropping Pattern | |

➤ Social Security Net

- ☒ Jana Seva Divas (15th of every month) : OAP/ WP/ ODP

➤ Water Security

- | | |
|--|---|
| <input checked="" type="checkbox"/> Weekly Reports | <input checked="" type="checkbox"/> Remedial Measures |
|--|---|

➤ Convergence of Action/ Resources

- ☒ Inter Departmental Coordination

➤ PRI Involvement

- | | |
|--|---|
| <input checked="" type="checkbox"/> Involvement & Empowerment : Visible Role ; | <input checked="" type="checkbox"/> Special Meeting to Focus on Drought |
| <input checked="" type="checkbox"/> Execution of FFWP | |

➤ NGO Coordination

- | | |
|---|---|
| <input checked="" type="checkbox"/> Supplementary Nutrition Feeding | <input checked="" type="checkbox"/> Rain Water Harvesting Structure |
| <input checked="" type="checkbox"/> Food for Work | <input checked="" type="checkbox"/> Awareness Building |

9. Lessons Learnt & Best Practices

- **Intervention on onset rather than waiting for the procedural formalities to be over:**
 - ☑ For providing labor intensive works, which is demand driven, Govt. need not wait for formal crop-cutting results. Crop cutting results may be essential for crop insurance and other purposes. It is necessary to provide wage employment to prevent forced migration and for ensuring food security.
 - ☑ The provision of Para 29 (b) of Orissa Relief Code has been invoked for the first time.
- **Area specific approaches and prioritization of tasks pays better results**
 - ☑ More focus was given to most affected areas.
 - ☑ Area of interventions based on ground realities.
- **Involvement of all stakeholders**
 - ☑ Crop & weather watch group; Monday meetings, assimilation of data and finalization of action points
 - ☑ Community Based Drought Management experiments; NGO involvement
- **Theme-based approach**
 - ☑ Food security
 - ✓ GR cards
 - ✓ Delegation of power at grassroots level
 - ✓ Jana Seva Divas, an effective convergence of social security net
 - ☑ Drinking Water
 - ✓ Zero Defunct Status, a time bound mission
- **Effective Monitoring**
 - ☑ Cabinet Sub-committee on Drought
 - ☑ Earmarked district visits by Secretaries to Government and feed back mechanism
- **MIS - Tracking Hunger & Malnutrition**
 - ☑ PRI involvement
 - ☑ Time-bound steps
 - ☑ Accountability
 - ☑ Response in-built
 - ☑ Effective follow-up

10. Conclusion

It is needless to mention here that disasters have been weakening the economy of the State as well as its people. The vulnerable people of the State are affected the most. However, due to effective monitoring and timely intervention, the impact of drought on the affected people was mitigated.

NO. OF VILLAGES HAVING CROPCLOSS OF 50% AND ABOVE 2002-2003

Sl. No.	District	No. of Blocks/ULBs in the District		No. of Blocks/ULBs containing affected villages		No. of G.P.s in the districts	No. of GPs containing affected villages	No. of villages in the districts	No. of villages declared to have Croploss												Total		G Total			
									Non-Irrigated				Irrigated													
		50% to 74%							75% and above				50% to 74%				75% and above									
		Village	Ward	Village	Ward				Village	Ward	Village	Ward	Village	Ward	Village	Ward	Village	Ward	Village	Ward						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20							
1	Angul	8	3	8	3	209	203	1905	807	13	698	2	83	0	31	0	1619	15	1534							
2	Balasore	12	4	12	3	289	258	2971	1927	0	547	0	112	0	0	0	2586	0	2586							
3	Bargarh	12	3	11	1	248	177	1177	214	0	719	0	2	0	6	0	941	0	941							
4	Bhadrak	7	2	7	2	193	152	1356	324	3	272	15	320	4	31	1	947	23	970							
5	Balangir	14	4	14	4	285	285	1781	158	0	1496	9	47	0	76	0	1777	9	1786							
6	Boudh	3	1	3	1	63	63	1101	378	0	422	1	121	0	133	1	1054	2	1056							
7	Cuttack	14	4	12	2	342	183	1977	915	0	0	0	158	0	0	0	1073	0	1073							
8	Deogarh	3	1	3	1	60	60	746	633	9	0	0	104	0	0	0	737	9	746							
9	Dhenkanal	8	3	8	3	199	197	1234	853	0	151	0	127	0	24	0	1155	0	1155							
10	Gajapati	7	2	7	2	129	117	1583	535	9	229	1	169	10	100	0	1033	20	1053							
11	Ganjam	22	18	22	14	475	423	2762	454	13	264	2	1295	50	248	6	2261	71	2332							
12	Jaipur	10	2	10	1	280	202	1789	815	20	125	0	12	0	0	0	952	20	972							
13	Jharsuguda	5	3	5	3	78	64	352	239	6	0	0	17	1	0	0	256	7	263							
14	J.S.Pur	8	2	0	0	196	0	1308			No Croploss above 50%												0	0	0	0
15	Kalahandi	13	3	13	3	273	247	2214	661	0	896	10	131	2	80	0	1768	12	1780							
16	Kandhamal	12	2	12	2	153	153	2506	2244	3	121	0	117	0	0	0	2482	3	2485							
17	Kendrapara	9	2	5	1	230	101	1582	397	0	267	5	2	0	0	0	666	5	671							
18	Keonjhar	13	4	13	4	286	284	2133	1641	0	313	0	94	0	0	0	2048	0	2048							
19	Khordha	10	5	10	0	168	150	1672	1046	11	7	0	123	0	0	0	1176	11	1187							
20	Koraput	14	4	9	0	226	73	2008	178	0	0	0	2	0	0	0	180	0	180							
21	Malkangiri	7	2	7	0	108	7	878	30	0	0	0	0	0	0	0	30	0	30							
22	Mayurbhanj	26	2	26	2	378	244	3718	1421	7	0	0	0	0	0	0	1421	7	1428							
23	Nawarangpur	10	2	10	0	169	120	881	386	0	94	0	0	0	0	0	480	0	480							
24	Nayagarh	8	2	8	0	179	179	1701	1055	4	132	0	315	2	0	0	1502	6	1508							
25	Nuapara	5	2	5	2	109	105	654	38	0	417	0	27	1	118	13	600	14	614							
26	Puri	11	4	11	0	230	102	1710	331	0	88	0	45	0	21	0	485	0	485							
27	Rayagada	11	3	11	0	171	164	2445	626	0	398	0	107	0	55	0	1186	0	1186							
28	Sambalpur	9	5	6	1	148	43	1247	295	13	37	5	22	0	5	0	359	18	377							
29	Sonepur	6	3	5	2	96	64	808	351	1	130	0	58	1	9	0	548	2	550							
30	Sundargarh	17	4	17	1	262	243	1688	1336	4	0	0	1	0	0	0	1337	5	1342							
Total		314	101	290	58	6232	4663	49887	20288	116	7823	50	3611	71	937	21	32659	259	32918							

No Croploss above 50%



Drought-2002