



INDIA METEOROLOGICAL DEPARTMENT

# DISASTROUS WEATHER EVENTS, 2012



ISSUED BY  
NATIONAL CLIMATE CENTRE  
OFFICE OF THE ADDITIONAL DIRECTOR GENERAL OF METEOROLOGY (RESEARCH)  
PUNE - 411005

**Cover Photo : People, stranded near a cattle shed, wave at a helicopter for help  
in the flood affected area of Tezpue, in Assam.**

**Courtesy : The Indian Express, 2 July 2012.**

**DESIGNED & PRINTED AT**

**THE CENTRAL PRINTING UNIT,  
OFFICE OF THE ADDITIONAL DIRECTOR GENERAL  
OF METEOROLOGY (RESEARCH),  
PUNE - 411005**



भारत सरकार  
GOVERNMENT OF INDIA

भारत मौसम विज्ञान विभाग  
INDIA METEOROLOGICAL DEPARTMENT

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## **DISASTROUS WEATHER EVENTS OF 2012**

The most striking disastrous weather events of 2012 were the following:

1. Heat wave conditions prevailed over some parts of the country and claimed 729 human lives out of which 366 from Andhra Pradesh, 142 from West Bengal and about 104 from Jharkhand.
2. During summer monsoon of 2012, floods and heavy rains claimed about 350 human lives apart from extensive damage to agriculture and public/private property.
3. The Severe Cyclonic Storm 'NILAM' formed over the Bay of Bengal near Lat.  $9.5^{\circ}\text{N}$  / Long.  $86.0^{\circ}\text{E}$  at about 0600 UTC during 28 October-1 November crossed North Tamil Nadu coast south of Chennai near Mahabalipuram on 31<sup>st</sup> October. It took a toll of 44 persons in Andhra Pradesh and 17 persons in Tamil Nadu. Damage to crops and public property reported.

The summary of these natural hazards is based on various reports of the India Meteorological Department and press information. The areas affected by the adverse weather conditions are depicted season wise on four maps.

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**TABLE - I : SNOWFALL 2012**

**CRITERIA**

Moderate : 7.6 to 34.9 cm in 24 hrs.

Rather Heavy : 15.6 to 35.5 cm in 24 hrs.

Heavy : 35.6 to 64.4 cm in 24 hrs.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
1.	4 Jan.	Kinnaur, Kullu and Lahaul - Spiti (Himachal Pradesh)	Moderate		i) About 200 tourists stranded in Rohtang Pass. ii) Vehicular traffic disrupted.
2.	7 Jan.	Kullu, Mandi, Lahaul - Spiti and Sirmaur (Himachal Pradesh)	Moderate		i) Electricity and water supply disrupted. ii) Number of buses stranded due to snowfall.
3.	9 Jan.	Chamba, Shimla and Sirmaur (Himachal Pradesh)	Heavy	4 persons died in Chamba.	i) Apple plants badly damaged. ii) Traffic on NH-22 disrupted. iii) Production in Hydro project affected.
4.	16 & 19 Jan.	Chamba, Kullu, Mandi and Lahaul - Spiti (Himachal Pradesh)	Heavy	5 persons died due to avalanche in Chamba.	16 link roads in Mandi cut off from main road causing disruption in road traffic.
5.	17 Jan.	Districts of Kashmir Valley (Jammu & Kashmir)	Heavy	3 persons died and 38 others injured.	i) Electricity and water supply disrupted. ii) Number of vehicles stranded due to snowfall.
6.	24 Jan.	Kupwara (Jammu & Kashmir)	Heavy	One BSF officer and 6 soldiers missing in avalanche.	Avalanche reported near LOC.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
7.	5 Feb.	Lahaul - Spiti, Mandi and Solang (Himachal Pradesh)	Heavy		i) Electricity supply disrupted. ii) Number of water pipes frozen. iii) Vehicular traffic disrupted.
8.	12 Feb.	Kinnaur, Kullu and Mandi (Himachal Pradesh)	Moderate		i) Traffic on NH-22 disrupted. ii) Production in Hydro project affected.
9.	15 Feb.	Kathua and Ramban (Jammu & Kashmir)	Heavy	3 persons died in avalanche.	
10.	22 Feb.	Bandipora and Srinagar (Jammu & Kashmir)	Heavy	16 army persons died and 9 others injured in avalanche.	
11.	26 Feb.	Srinagar (Jammu & Kashmir)	Moderate		Number of persons trapped in avalanche.
12.	28 Feb.	Bandipora (Jammu & Kashmir)	Heavy		i) Avalanche reported. ii) 11 houses and 2 school buildings damaged.
13.	7 Jun.	Leh (Jammu & Kashmir)	Heavy		About 400 persons trapped in landslide in Khardungla pass.
14.	25 Aug.	Shopian (Jammu & Kashmir)	Moderate		Fruits in about 1,000 acres of land affected.

**TABLE – II : COLD WAVE 2012**

**CRITERIA**

(A) When; Normal minimum temperature is 10<sup>0</sup>C or more

Cold wave : Night temperature 5<sup>0</sup>C to 6<sup>0</sup>C below normal

Severe cold wave : Night temperature 7<sup>0</sup>C or more below normal

(B) When; Normal minimum temperature is less than 10<sup>0</sup>C

Cold wave : Night temperature 4<sup>0</sup>C to 5<sup>0</sup>C below normal

Severe cold wave : Night temperature 6<sup>0</sup>C or more below normal

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
1.	2 Jan.	Dumka, East Singhbhoom, Lohardaga, Palamu, Ramgarh and Ranchi (Jharkhand)	Severe (Both A & B as appropriate)	12 persons died.	
2.	6 Jan.	Gaziabad (Uttar Pradesh)	Severe ( B)	One person died in Pilkhuwa city.	
3.	9-15 Jan.	(a) Guntur and Visakhapatnam (Andhra Pradesh)	Severe (A)	7 persons died.	
		(b)Patna (Bihar)	Severe ( B)	4 persons died.	



<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
		(c)Gumla, Hazaribagh, Koderma, Latehar, Ramgarh, Ranchi and West Singhbhoom (Jharkhand)	Severe (Both A & B as appropriate)	13 persons died.	
		(d) Agra, Barabanki and Bijnor (Uttar Pradesh)	Severe (Both A & B as appropriate)	14 persons died.	
4.	19 Jan.	Jaipur (Rajasthan)	Severe (B)	One person died.	
5.	24 Jan.	Saran (Bihar)	Severe (A)	One person died.	
6.	27 Nov.	Bokaro, Chatra and Ramgarh (Jharkhand)	Severe (Both A & B as appropriate)	10 persons died.	
7.	24-30 Dec.	(a)Chatra, Dhanbad, Dumka, Garwah, Giridih, Gumla, Jamtara, Hazaribagh, Palamu, Ramgarh and Ranchi (Jharkhand)	Severe (Both A & B as appropriate)	52 persons died.	
		(b)Guna (Madhya Pradesh)	Severe (B)	One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
		(c) Birbhum, Burdwan and Malda (West Bengal)	Severe (A)	4 persons died.	
		(d) Baghpat, Ballia, Banda, Barabanki, Bijnor, Chandauli, Deoria, Gazipur, Gonda, Hamirpur, Sonbhadra and Sultanpur (Uttar Pradesh)	Severe (Both A & B as appropriate)	19 persons died.	Heavy fog disrupted rail and road service.

**TABLE – III : HEAT WAVE 2012**

**CRITERIA**

**(A) When; Normal maximum temperature is 40°C or less**

**Heat wave : Departure from normal is 5°C to 6°C**

**Severe heat wave : Departure from normal is 7°C or more**

**(B) When; Normal maximum temperature is more than 40°C**

**Heat wave : Departure from normal is 4°C to 5°C**

**Severe heat wave : Departure from normal is 6°C or more**

1.	19 Mar.	Cuddapah, Karnool and Warangal (Andhra Pradesh)	Severe (A)	3 persons died.	
2.	22 Mar.	Hyderabad (Andhra Pradesh)	Severe (A)	One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
3.	9 Apr.	Nanded (Maharashtra)	Severe (B)	One person died.	
4.	17 Apr.	Bokaro (Jharkhand)	Severe (A)	One person died.	
5.	22 Apr.	Ranchi (Jharkhand)	Severe (A)	2 persons died.	
6.	30 Apr- 2 May, 19-23 May, 25-30 May	Coastal Andhra Pradesh, Rayalseema and Telangana (Andhra Pradesh)	Severe (Both A & B as appropriate)	162 persons died.	
7.	8 May	Burdwan (West Bengal)	Severe (A)	One person died.	
8.	12 May	West Medinipur (West Bengal)	Severe (A)	One person died.	
9.	15 May	Bankura, Murshidabad and Nadiya (West Bengal)	Severe (A)	3 persons died.	
10.	16 May	Ranchi (Jharkhand)	Severe (A)	One person died.	
11.	19-21 May	Burdwan, Bankura Hoogli and Purulia (West Bengal)	Severe (A)	5 persons died.	
12.	20 May	Raipur (Chattisgarh)	Severe (B)	One person died.	
13.	23 & 24 May	Dhanbad, Ramgarh and Ranchi (Jharkhand)	Severe (A)	5 persons died.	
14.	24 May	Purulia (West Bengal)	Severe (A)	One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
15.	24-28 May	Balasore, Bolangir, Boudh and Ganjam (Odisha)	Severe (Both A & B as appropriate)	6 persons died.	
16.	25 May	Dantewada and Raipur (Chattisgarh)	Severe (B)	2 persons died.	
17.	27 May	Allahabad, Banda and Jalaun (Uttar Pradesh)	Severe (Both A & B as appropriate)	10 persons died.	
18.	29 May	Agra (Uttar Pradesh)	Severe (B)	4 persons died.	
19.	3 <sup>rd</sup> & 4 <sup>th</sup> week of May	Some parts of Odisha	Severe (Both A & B as appropriate)	About 30 persons died.	
20.	31 May-6 Jun.	Coastal districts of Andhra Pradesh	Severe (Both A & B as appropriate)	15 persons died.	
21.	1 Jun.	(a) Ranchi (Jharkhand)	Severe (A)	One person died.	
		(b) Bhandara (Maharashtra)	Severe (A)	2 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
22.	1-17 Jun	Parts of Odisha	Severe (Both A & B as appropriate)	17 persons died.	
23.	1 <sup>st</sup> & 2 <sup>nd</sup> week of Jun.	Coastal AP, Telangana and Rayalseema (18 districts of Andhra Pradesh)	Severe (Both A & B as appropriate)	About 185 persons died.	
24.	2 Jun.	(a) Amraoti, Bhandara and Gadchiroli (Maharashtra)	Severe (Both A & B as appropriate)	4 persons died.	
		(b) Muzaffamagar (Uttar Pradesh)	Severe (B)	One person died.	
25.	1 <sup>st</sup> & 2 <sup>nd</sup> week of Jun.	Bankura, Burdwan, Howrah, Hoogli, Kolkata, Malda, Murshidabad, North 24 paraganas, Purulia, South Dinajpur, South- 24 paraganas and West Medinipur (West Bengal)	Severe (Both A & B as appropriate)	About 130 persons died.	
26.	4-6 Jun.	(a) Some parts Bihar	Severe (Both A & B as appropriate)	3 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
		(b) Most parts of Jharkhand	Severe (Both A & B as appropriate)	About 70 persons died.	
27.	8 & 9 Jun.	Kunti and West Singhbhum (Jharkhand)	Severe (Both A & B as appropriate)	6 persons died.	
28.	10 & 11 Jun.	Some parts of Bihar	Severe (Both A & B as appropriate)	5 persons died.	
29.	13-17 Jun.	Garwah, Latehar, Palamu and West Singhbhum (Jharkhand)	Severe (Both A & B as appropriate)	16 persons died.	
30.	14- 17 Jun.	Banda, Barabanki, Chitrakoot, Jalaun, Jhansi, Hamirpur, Lalitpur, Lucknow and Mahoba (Uttar Pradesh)	Severe (Both A & B as appropriate)	16 persons died.	
31.	21-25 Jun.	Amritsar, Bhatinda, Hoshiarpur, Karnal, Ludhiana and Mohali (Punjab)	Severe (Both A & B as appropriate)	14 persons died.	
32.	26 Jun.	East Medinipur (West Bengal)	Severe (A)	One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
33.	28 Jun.	Palamu (Jharkhand)	Severe (A)	2 persons died.	
34.	3 Jul.	Burdwan (West Bengal)	Severe (A)	One person died.	

**TABLE – IV : SQUALL 2012**

**A sudden increase of wind speed by in least 29 kmph (16 kts), the speed rising to 40 kmph (22 kts) or more and lasting for in least one minute**

**CRITERIA**

**Moderate : Surface wind speed (in gusts) up to 80 kmph**

**Severe : Surface wind speed (in gusts) > 80 kmph**

1.	31 Mar.	Hasan (Karnataka)	Severe	One woman and a girl died.	
2.	17 & 18 Apr.	Raichur (Karnataka)	Severe	One woman and a baby died.	About 75 houses damaged in Arishinagar village.
3.	28 Apr.	Amritsar, Jalandhar, Hoshiarpur and Kapurthala (Punjab)	Moderate		Damage to standing and harvested stock of wheat lying in open area reported.
4.	1 Sep.	Bengaluru Rural (Karnataka)	Severe	One person died when branch of a tree fell on him in Gundigere village.	Many trees and electric poles uprooted disrupting road traffic and power supply.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
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**TABLE – V : GALE 2012**

**CRITERIA**

**Strong : Wind speed  $\geq$  75 kmph**

1.	19 Feb.	Parts of Jammu & Kashmir	Strong	3 persons died and many injured.	i) Number of houses damaged. ii) Some trees/electric poles uprooted.
2.	19 & 20 Mar.	Bandipora and Srinagar (Jammu & Kashmir)	Strong	2 persons died and many injured.	i) Many houses fully and partially damaged. ii) Roof tops of many houses blown away. iii) Trees/towers/electric poles uprooted causing disruption in traffic.
3.	7 Apr.	Karimnagar (Andhra Pradesh)	Strong		i) Paddy mango crops in 600 acres of land affected. ii) Number of poles/trees uprooted causing disruption in power supply.
4.	23 May	Jalgaon (Maharashtra)	Moderate		Banana plants of hundreds of hectares of land damaged.
5.	24 Aug.	Jammu (Jammu and Kashmir)	Moderate		i) Damage to crops reported. ii) Some houses damaged.



<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
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**TABLE – VI : DUST STORM 2012**

**CRITERIA**

**Moderate : Wind speed between 39 to 74 kmph and horizontal visibility up to 500 metres**

**Severe : Wind speed  $\geq$  75 kmph and horizontal visibility up to 50 metres**

1.	10 Apr.	Jind and Yamunanagr (Haryana)	Severe	2 persons died.	i) Many trees uprooted causing disruption in road traffic. ii) Few kachcha houses damaged.
2.	8 May.	Bikaner (Rajasthan)	Severe	One person died	
3.	12 May.	Chandigarh (Union Territories)	Moderate		Number of trees in different sectors uprooted causing disruption in road traffic and electric supply.
4.	13 May.	Sawai Madhopur (Rajasthan)	Severe	2 persons died.	Number of trees/electric poles uprooted causing disruption in telecommunication services and road traffic.
5.	3 Jun.	Fatehbad and Sirsa (Haryana)	Severe	Few livestock perished.	i) About 300 electric poles uprooted. ii) Few number of transformers damaged causing disruption in electric supply of about 50 villages. iii) Many trees uprooted causing disruption in road traffic. iv) Few kachcha houses damaged.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
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**TABLE – VII : LIGHTNING 2012**

1.	13 Mar.	Barabanki, Shrawasti, Sitapur and Sultanpur (Uttar Pradesh)		5 persons died and 5 others injured.	
2.	4 Apr.	Kalahandi (Odisha)		2 persons died.	
3.	5 Apr.	(a) Sundargarh (Odisha)		One person died.	
		(b) Alwar (Rajasthan)		One person died.	
4.	6 Apr.	Nawarangapur (Odisha)		One persons died.	
5.	7 Apr.	(a) Medak (Andhra Pradesh)		One persons died in Chinna Kodur Mandal.	
		(b) Balasore and Ganjam (Odisha)		3 persons died.	
		(c) Murshidabad, Nadia, North Dinajpur and North 24 Paraganas (West Bengal)		14 persons died.	
6.	9 Apr.	Belgum (Karnataka)		One woman died in Chikodi.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
7.	10 Apr.	Balasore, Cuttack, Dhenkanal, Jajpur and Mayurbhanj (Odisha)		8 persons died.	
8.	13 Apr.	(a) Cuttack (Odisha)		One person died.	
		(b) Ajmer, Baran, Bhilwara, Bundi, Jaipur and Kota. (Rajasthan)		7 persons died.	
9.	14 Apr.	Baran, Bikaner, Bundi, Jaipur and Kota (Rajasthan)		7 persons died.	
10.	15 Apr.	Sundargarh (Odisha)		One person died.	
11.	17 Apr.	(a) Raichur and Yadgir (Karnataka)		2 persons died.	
		(b) Ganjam and Khurda (Odisha)		3 persons died.	
12.	18 Apr	Bagalkot, Belgaum, Bellary, Dharwad, Koppal and Yadgir (Karnataka)		7 persons died.	
13.	19 Apr.	(a) Pune (Maharashtra)		One person died.	
		(b) Jalpaiguri (West Bengal)		One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
14.	20 Apr.	Malappuram (Kerala)		2 persons died in Nilambur taluka.	
15.	21 & 23 Apr.	Koraput (Odisha)		5 persons died.	
16.	23 Apr.	Wayanad (Kerala)		One person died in Thamarassery town.	
17.	24 Apr.	Kollam (Kerala)		2 students died in Sasthamkotta village.	
18.	25 Apr.	(a) Jajpur, Sambalpur and Sundargarh (Odisha)		3 persons died.	
		(b) Namakkal, Salem and Tiruchirappalli (Tamil Nadu)		i) 2 persons died in Salem, other in Namakkal. ii) 9 goats perished in Tiruchirappalli.	
		(c) Birbhum and Murshidabad (West Bengal)		5 persons died and 16 others injured.	
19.	26 Apr.	(a) Idukki (Kerala)		One person died and other injured in Adimali town.	
		(b) Ganjam and Mayurbhanj (Odisha)		3 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
		(c) Birbhum (West Bengal)		One person died.	
20.	28 Apr.	(a)Angul, Dhenkanal and Mayurbhanj (Odisha)		4 persons died.	
		(b) Jalpaiguri and North 24 Paraganas (West Bengal)		2 persons died.	
21.	29 Apr.	(a) Guntur, Khammam, Prakasam and Warangal (Andhra Pradesh)		14 persons died	
		(b) Kupwara (Jammu & Kashmir)		One woman died and other injured.	
		(c) Howrah (West Bengal)		10 persons died.	
22.	30 Apr.	Kollam (Kerala)		One person died and 2 others injured in Kulathupuzha village.	
23.	2 May	(a) Karur (Tamil Nadu)		2 persons died.	
		(b) Hoogly and Howrah (West Bengal)		2 persons died.	
24.	3 May	Hoogly (West Bengal)		One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
25.	5 May	Thiruvananthapuram (Kerala)		One person died.	
26.	4, 9, 14, 18, 20, 21, 23, 28 May	Cuttack, Ganjam, Keonjhar, Nayaghar and parts of North Odisha (Odisha)		29 persons died.	
27.	8 May	Kolar (Karnataka)		One woman died in Mulbagal town.	
28.	9 May	(a) Dhule (Maharashtra)  (b) Darjeeling (West Bengal)		One person died.  One person died.	
29.	10 May	(a) Gulbarga (Karnataka)  (b) Buldhana, Hingoli, Jalgaon and Pune (Maharashtra)		One woman died in Madana village.  10 persons died.	
30.	11 May	(a) Beed (Maharashtra)  (b) Purulia (West Bengal)		3 persons died in Gewarai tehsil.  One person died.	
31.	11 & 12 May	Bijapur, Belgaum, Gulbarga, Haveri, Koppal and Raichur. (Karnataka)		7 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
32.	12 May	Ahmednagar (Maharashtra)		One person died.	
33.	13 May	East Medinipur and Purulia (West Bengal)		4 persons died.	
34.	19 May	Bankura (West Bengal)		One person died.	
35.	21 May	Malappuram (Kerala)		One died in Tirur town.	
36.	22 May	Nadia (West Bengal)		2 persons died.	
37.	27 May	Burdwan and Nadia (West Bengal)		12 persons died.	
38.	2 Jun.	Maharajganj and Deoria (Uttar Pradesh)		12 persons died.	
39.	3, 9, 15 Jun.	Some parts of Odisha		20 persons died.	
40.	7 Jun.	Birbhun, Purulia, South 24 Paraganas and West Medinipur (West Bengal)		8 persons died.	
41.	8 Jun.	Hoogli (West Bengal)		One person died.	
42.	9 Jun.	East Medinipur, Hoogly and Nadia (West Bengal)		7 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
43.	10 Jun.	North and South 24 Paraganas (West Bengal)		7 persons died.	
44.	12 Jun.	Khandwa (Madhya Pradesh)		4 died and other injured.	
45.	14 Jun.	Purulia (West Bengal)		2 persons died.	
46.	15 Jun.	Balaghat (Madhya Pradesh)		2 persons died.	
47.	17 Jun.	North 24 Paraganas		One person died.	
48.	18 Jun.	Purulia (West Bengal)		2 persons died.	
49.	19 Jun.	Bankura (West Bengal)		One person died.	
50.	21 Jun.	Hoogly and Purulia (West Bengal)		5 persons died.	
51.	23 Jun.	Burdwan (West Bengal)		2 persons died.	
52.	28 Jun.	North and South 24 Paraganas (West Bengal)		5 persons died.	
53.	1,12-15, 17, 18, 26,27, 30 Jul.	Parts of Odisha		11 persons died.	



<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
54.	5 Jul.	Malda, North and South Dinajpur (West Bengal)		8 persons died.	
55.	7 Jul.	South 24 Paraganas (West Bengal)		One person died.	
56.	8 Jul.	Hoogly (West Bengal)		One person died.	
57.	10 Jul.	Burdwan (West Bengal)		One person died.	
58.	11 Jul.	North 24 Paraganas (West Bengal)		One person died.	
59.	12 Jul.	Burdwan and Purulia (West Bengal)		One person died and 12 others injured.	
60.	13 Jul.	Jalpaiguri and North 24 Paraganas (West Bengal)		2 persons died.	
61.	14 Jul.	North Dinajpur and Purulia (West Bengal)		5 persons died.	
62.	16 Jul.	Burdwan (West Bengal)		One person died.	
63.	17 Jul.	Dharampuri (Tamil Nadu)		One woman died.	
64.	18 Jul.	Burdwan (West Bengal)		5 persons died.	
65.	20 Jul.	Purulia (West Bengal)		One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
66.	23 Jul.	Birbhum (West Bengal)		One person died.	
67.	24 Jul.	Azamgarh (Uttar Pradesh)		One person died.	
68.	25 Jul.	West Medinipur (West Bengal)		One person died.	
69.	1-31 Aug.	Most parts of Gujarat		3 persons died.	
70.	2 Aug.	Mayurbhanj (Odisha)		2 Agricultural labors died and 2 others injured.	
71.	5 Aug.	Purulia (West Bengal)		3 persons died and 5 others injured.	
72.	10 Aug.	East and West Medinipur, Purulia and South 24 Paraganas (West Bengal)		9 persons died and 2 others injured.	
73.	16 Aug.	Purulia (West Bengal)		One person died.	
74.	17 Aug.	Murshidabad (West Bengal)		One person died.	
75.	18 Aug.	Kangra (Himachal Pradesh)		One person died.	
76.	19 Aug.	Balaghat (Madhya Pradesh)		2 persons died and 5 others injured.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
77.	21 Aug.	(a) Satna (Madhya Pradesh)		One person died and other injured.	
		(b) Mathura (Uttar Pradesh)		2 persons died and 2 others injured.	
78.	23 Aug.	Sitamarhi (Bihar)		3 children died and 2 others injured.	
79.	24 Aug.	South 24 Paraganas (West Bengal)		2 persons died and other injured.	
80.	25 Aug.	(a) Bagalkot (Karnataka)		One person died.	
		(b) North Dinajpur (West Bengal)		One person died.	
81.	30 Aug.	Wardha (Maharashtra)		2 persons died.	
82.	31 Aug.	Karimnagar (Andhra Pradesh)		One person died.	
83.	2 Sep.	(a) Mandla (Madhya Pradesh)		One person died and 4 others injured.	
		(b) Nagpur (Maharashtra)		2 persons died.	
		(c) Bolangir (Odisha)		One person died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
84.	4 Sep.	(a) Rajgarh (Madhya Pradesh)		3 persons died.	
		(b) Kendrapara (Odisha)		One person died.	
85.	5 Sep.	Thane (Maharashtra)		One person died.	
86.	7 Sep.	Dhenkanal (Odisha)		3 persons died.	
87.	9 Sep.	Chandrapur (Maharashtra)		3 persons died and 3 others injured.	
88.	10 Sep.	Kendrapara and Sundargarh (Odisha)		2 persons died.	
89.	16 Sep.	(a) Kendrapara (Odisha)		One person died.	
		(b) Murshidabad (West Bengal)		One person died.	
90.	17 Sep.	Mau and Gonda (Uttar Pradesh)		2 persons died.	
91.	18 Sep.	(a) Nawarangpur (Odisha)		One person died.	
		(b) North Dinajpur (West Bengal)		One person died.	
92.	19 & 23 Sep.	Gajapati (Odisha)		2 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
93.	20 Sep.	(a) Adilabad and Nizamabad (Andhra Pradesh)		7 persons died.	
		(b) North Dinajpur (West Bengal)		One died and other injured.	
94.	21 Sep.	(a) Wardha (Maharashtra)		2 persons died.	
		(b) Sundargarh (Odisha)		2 persons died.	
95.	22 Sep.	Murshidabad (West Bengal)		5 persons died and 10 others injured.	
96.	24 Sep.	South 24 Paraganas (West Bengal)		One person died.	
97.	27 Sep.	Haveri and Shimoga (Karnataka)		One person died each in Ranebennur city and Shiralkoppa town.	
98.	28 Sep.	(a) Bhadrak (Odisha)		One person died.	
		(b) West Medinipur (West Bengal)		2 persons died.	
99.	29 Sep.	Bargarh and Jharsuguda (Odisha)		4 persons died.	
100.	3 Oct.	Adilabad (Andhra Pradesh)		2 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
101.	4 & 5 Oct.	Murshidabad (West Bengal)		2 persons died.	
102.	10 Oct.	Palakkad (Kerala)		One person electrocuted in Alathur village.	
103.	14 Oct.	(a) Chamrajnagar and Mysore (Karnataka)		5 persons died including 3 women in Kollegal & Heggadadevana kote taluka.	
		(b) Thiruvananthapuram (Kerala)		One person electrocuted in Thiruvananthapuram city .	
104.	15 Oct.	Chittor (Andhra Pradesh)		One person died.	
105.	17 Oct.	Thiruvananthapuram (Kerala)		One person electrocuted in Katakada town .	
106.	18 Oct.	Tirunelveli (Tamil Nadu)		2 persons died.	
107.	11 Nov.	Thiruvananthapuram (Kerala)		One person electrocuted.	
108.	13 Dec.	Some parts of Odisha		5 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
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**TABLE –VIII : THUNDERSTORM 2012**

**CRITERIA**

**Moderate : Loud peals of thunder with frequent lightning flashes,  
Moderate to heavy rains and maximum wind speed 29 to 74 kmph**

**Severe : Continuous thunder and lightning, heavy rains and  
maximum wind speed  $\geq$  75 kmph**

1.	9 Jan.	Ranchi (Jharkhand)	Severe	One person died.	Damage to crops reported.
2.	14 Feb.	East Singhbhoom, Hazaribagh and Khunti (Jharkhand)	Severe	4 persons died.	Damage to vegetables and kachcha houses reported.
3.	15 Feb.	Chatra, Gumla, East Singhbhoom, Lohardaga, Ramgarh and Simdega (Jharkhand)	Severe	One person died.	i) Number of trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services. ii) Water logging at many places reported.
4.	13 Mar.	Ranchi (Jharkhand)	Severe	3 persons died.	i) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services. ii) Roofs of houses blown away.
5.	4 & 6 Apr.	Mahabubnagar and Medak (Andhra Pradesh)	Moderate		Plantations in about 1150 acres of cropland affected and mango crops damaged.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
6.	5 Apr.	Barpeta (Assam)	Severe	2 persons died.	Some trees/electric poles uprooted disrupting power supply, road/rail traffic and telecommunication services.
7.	7 Apr.	Guntur, Karimnagar, Krishna, Mahabubnagar and Visakhapatnam (Andhra Pradesh)	Severe	i) 2 persons died. ii) About 20 goats and 30 other cattle heads perished.	Extensive damage to mango and chilly crops reported.
8.	8 Apr.	Howrah, Nadia, Purulia and South 24 Paraganas (West Bengal)	Severe	7 persons died.	i) Number of trees/electric poles uprooted disrupting power supply, road/rail traffic and telecommunication services. ii) Roofs of many kachcha houses blown away.
9.	9 Apr.	Sitamarhi (Bihar)	Severe	9 persons died.	i) Number of trees/electric poles uprooted disrupting power supply, road/rail traffic and telecommunication services. ii) Roofs of many kachcha houses blown away.
10.	10 Apr.	Aligarh, Bareilly and Gaziabad (Uttar Pradesh)	Severe	5 persons died due to falling of trees.	Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
11.	13 Apr.	East Medinipur and South 24 Paraganas (West Bengal)	Severe	6 persons died.	i) Damage to crops reported. ii) Number of trees / electric / telephone poles uprooted disrupting power/electric supply and road traffic. iii) Roofs of many kachcha houses blown away.



<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
12.	15 Apr.	(a) Bongaigaon, Dhemaji, Dhubri, Goalpara, Jorhat, Kamrup, Morigaon, Nagaon, Sonitpur and Udalguri (Assam)	Severe	19 persons died.	<ul style="list-style-type: none"> <li>i) Extensive damage to standing crops reported.</li> <li>ii) About 300 houses damaged.</li> <li>iii) Number of trees / electric / telephone poles uprooted disrupting power/electric supply and road traffic.</li> <li>iv) Roofs of many kachcha houses blown away.</li> </ul>
		(b) Bishnupur, Imphal East and Imphal West, Thoubal (Manipur)	Severe	13 persons died.	<ul style="list-style-type: none"> <li>i) Damage to standing crops reported.</li> <li>ii) Tin roofs of many houses blown away, walls collapsed.</li> <li>iii) Some people rendered homeless.</li> <li>iv) Many trees and electric poles uprooted disrupting road traffic/telecommunication services/power supply.</li> </ul>
		(c) Ranchi (Jharkhand)	Severe	2 persons died.	Some trees/electric poles uprooted disrupting power supply, road/rail traffic and telecommunication services.
13.	17 Apr.	Darrang, Kamrup, Morigaon and Nagaon (Assam)	Severe	2 persons died and about 100 others injured.	<ul style="list-style-type: none"> <li>i) Standing crops damaged.</li> <li>ii) About 300 families rendered homeless.</li> <li>iii) Number of houses damaged.</li> <li>iv) Roofs of kachcha houses blown away.</li> <li>v) Many Trees/electric poles uprooted disrupting road/rail services.</li> </ul>
14.	18 Apr.	Barpeta, Kamrup, Lakhimpur and Sibsagar (Assam)	Severe		Some trees/electric poles uprooted disrupting power supply, road/rail traffic and telecommunication services.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
15.	19 Apr.	Kamrup(Assam)	Moderate	5 persons injured.	Number of people rendered homeless. Tin sheets of houses blown away.
16.	22 Apr.	Dhemaji and Jorhat (Assam)	Severe	One person died and 3 others injured.	i) Roofs of kachcha houses blown away. ii) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
17.	23 Apr.	Dibrugarh, Kachar, Karimganj, Nagaon and Tinsukia (Assam)	Severe	4 persons died and 38 others injured.	i) People from more than 100 villages rendered homeless. ii) Road traffic on NH-37 and NH-52 disrupted.
18.	25 Apr.	(a) Dhanbad and Ranchi (Jharkhand)	Severe	3 persons died and 4 others injured.	i) Roofs of kachcha houses blown away. ii) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
		(b) Coimbatore (Tamil Nadu)	Severe		About 2 lakhs banana plants damaged.
19.	27 Apr.	Ranchi (Jharkhand)	Severe	2 persons died.	i) Electrical/Electronic items damaged. ii) Electrical supply disrupted. iii) Roofs of many kachcha houses blown away.
20.	29 Apr.	(a) Khammam, Krishna and Warangal (Andhra Pradesh)	Severe	7 persons died.	i) Paddy, groundnut and mango crops badly damaged. ii) Electrical/Electronic items damaged. iii) Electrical supply disrupted. iv) Roofs of many kachcha houses blown away.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
		(b) Barpeta, Bongaigaon, Dhubri, Jorhat and Nalbari (Assam)	Severe		<ul style="list-style-type: none"> <li>i) Damage to standing crops reported.</li> <li>ii) More than 500 houses damaged.</li> <li>iii) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.</li> </ul>
21.	30 Apr.	Dhubri (Assam)	Severe	One person died and other injured.	Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
22.	1 May	(a) Dhubri and Kokrajhar (Assam)	Severe		<ul style="list-style-type: none"> <li>i) Extensive damage to standing crops reported.</li> <li>ii) Extensive damage to many houses of more than 20 villages reported.</li> <li>i) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.</li> </ul>
		(b)Kishanganj (Bihar)	Severe	6 persons died.	<ul style="list-style-type: none"> <li>i) Number of trees/electric poles uprooted disrupting power supply and road traffic.</li> <li>ii) Number of houses damaged.</li> </ul>
23.	2 May	Krishnagiri (Tamil Nadu)	Severe	One person died.	About 10 houses damaged.
24.	3 May	Dhubri, Goalpara, Kamrup and Kokrajhar (Assam)	Severe	9 persons died and many injured.	<ul style="list-style-type: none"> <li>i) Nearly 3000 houses of 200 villages damaged/collapsed in Dhubri.</li> <li>ii) Extensive damage to standing crops reported.</li> <li>iii) Roofs of many houses blown away.</li> <li>iv) Many trees/electric poles uprooted disrupting power/electricity/road traffic.</li> </ul>
25.	4 May	Bardwan, North and South Paraganas (West Bengal)	Severe	3 persons died and 5 others injured.	<ul style="list-style-type: none"> <li>i) Number of trees/electric poles uprooted disrupting power supply and road traffic.</li> <li>ii) Many houses damaged.</li> </ul>

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
26.	9 May	Dhubri and Kokrajhar (Assam)	Severe	One person died and other injured.	Some trees/electric poles uprooted disrupting power supply and road traffic.
27.	10 May	Beed (Maharashtra)	Severe	3 persons died.	Roof tops of many kachcha houses blown away in Gewaraee tehsil.
28.	12 May	Goalpara and Nalbari (Assam)	Severe	i) 2 persons died. ii) 6 cattle heads perished.	Number of trees/electric poles uprooted disrupting power supply and road traffic.
29.	13 May	Dhubri and Dibrugarh (Assam)	Severe	3 persons died and 5 others injured.	i) Some trees/electric poles uprooted disrupting power supply and road traffic. ii) Few houses damaged.
30.	14 May	Dibrugarh, Nalbari, Sibsagar and Tinsukia (Assam)	Severe	4 persons died and 3 others injured.	i) Damage to standing crops reported due to torrential rain. ii) Roofs of many houses blown away. iii) Number of trees/electric poles uprooted disrupting power supply and road traffic.
31.	15 May	(a) Barpeta, Baska, Bongaigaon, Darrang, Kokrajhar and Nalbari (Assam)	Severe	One person died.	i) Extensive damage to standing crops reported. ii) Many kachcha houses collapsed. iii) Some people rendered homeless.
		(b) Parts of Tripura	Severe		i) Damage to standing crops reported. ii) More than 200 houses damaged. iii) Number of trees/electric poles uprooted disrupting power supply and road traffic

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
32.	16 May	Bongaigaon, Dhemaji, Nagaon, Nalbari and Udalguri (Assam)	Severe		<ul style="list-style-type: none"> <li>i) About 15,000 families rendered homeless in Nalbari.</li> <li>ii) Extensive damage to standing crops and cattle farming reported.</li> </ul>
33.	19 May	Madhepura, Muzaffarpur, Munger, Sitamrhi and Saharsa (Bihar)	Severe	5 persons died and few others injured.	<ul style="list-style-type: none"> <li>i) Damage to crops reported.</li> <li>ii) Many houses collapsed.</li> <li>iii) Number of trees/electric poles uprooted disrupting power supply and road traffic.</li> <li>iv) Roofs of many kachcha houses blown away.</li> </ul>
34.	3 Jun.	(a) Fatehbad and Sirsa (Haryana)	Severe	4 persons died.	<ul style="list-style-type: none"> <li>i) Some of electric poles/trees uprooted disrupting road traffic/ telecommunications services.</li> <li>ii) Few transformers failed causing disruption in electric supply.</li> <li>iii) Some of houses in about 50 villages damaged.</li> </ul>
		(b) Tripura	Severe		A tornado caused loss of property worth more than a crore.
35.	4 Jun.	(a) Barpeta, Dhubri and Nalbari (Assam)	Severe	3 persons died and 3 others injured in Barpeta.	<ul style="list-style-type: none"> <li>i) Extensive damage to standing crops reported.</li> <li>ii) Roofs of many kachcha houses blown away.</li> <li>iii) Number of trees/electric poles uprooted disrupting communications and power supply.</li> </ul>
		(b) North Tripura (Tripura)	Severe	One person died by falling upon a tree.	<ul style="list-style-type: none"> <li>i) About 200 kachcha houses collapsed rendering about 40 families homeless in Paschim Panisagar area.</li> <li>ii) Damage to standing crops reported.</li> <li>iii) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.</li> </ul>

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
36.	7 Jun.	Some parts of Bihar	Severe	One person died and 6 others injured due to wall collapse.	
37.	12 Jun.	Kamrup (Assam)	Severe	One person died and 8 others injured.	Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
38.	17 Jun.	Jamnagar, Junagadh, Porabandar and Rajkot (Gujarat)	Severe	About 15 persons died.	Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
39.	21 Jun.	Baksa, Darrang, Dhubri and Kamrup (Assam)	Severe	i) 4 persons died and 6 others injured. ii) 4 cattle heads perished.	i) Number of trees/electric poles uprooted disrupting power supply and road traffic. ii) Roofs of many kachcha houses blown away.
40.	22 Jun.	Morigaon (Assam)	Severe	One person died in Betani village and other injured.	
41.	25 Jun.	Dhubri (Assam)	Severe	One person died and other injured in Sapatgram village.	
42.	27 Jun.	Dhubri (Assam)	Severe		i) Extensive damage to standing crops reported. ii) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication.
43.	4 Jul.	Giridih (Jharkhand)	Severe	One student died and 8 others injured.	Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
44.	25 Jul.	Ranchi (Jharkhand)	Severe	One person died.	A number of trees/electric poles uprooted disrupting power supply and road traffic.
45.	28 Jul.	Chatra (Jharkhand)	Severe	3 persons died.	i) Number of trees/electric poles uprooted disrupting power supply and road traffic. ii) Roofs of many kachcha houses blown away.
46.	4 Aug.	Bokaro and Ranchi (Jharkhand)	Severe	4 persons died and 18 others injured.	i) Electrical/Electronic items damaged. ii) Electrical supply disrupted. iii) Roofs of many kachcha houses blown away.
47.	6 Aug.	Garhwa (Jharkhand)	Severe	3 persons died and 3 others injured.	i) Roofs of kachcha houses blown away. ii) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
48.	9 Aug.	Ranchi (Jharkhand)	Severe	2 persons died and 3 others injured.	i) Break down of Electric power feeder reported. ii) Electrical/Electronic items damaged. iii) Electrical supply disrupted. iv) Roofs of many kachcha houses blown away.
49.	10 Aug.	Chatra, Giridih, Ranchi and Palamu (Jharkhand)	Severe	3 persons died and other injured.	i) Some trees/electric poles uprooted disrupting power supply and road traffic. ii) Roofs of many kachcha houses blown away.
50.	21 Aug.	Deoghar (Jharkhand)	Severe	2 persons died and 7 others injured.	i) Roofs of kachcha houses blown away. ii) Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
51.	28 Aug.	Hazaribagh (Jharkhand)	Severe	2 persons died.	

<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
52.	9 Sep.	Bokaro (Jharkhand)	Severe	One person died.	
53.	12 & 13 Sep.	Ranchi (Jharkhand)	Severe	2 persons died and 7 others injured.	Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.
54.	26 Sep.	Chennai (Tamil Nadu)	Severe	Few deaths reported.	i) Some trees/electric poles uprooted. ii) Train/road services affected due to inundation.
55.	11 Dec.	Janjgir-Champa and Surajpur (Chattisgarh)	Severe	3 persons died.	Some trees/electric poles uprooted disrupting power supply, road traffic and telecommunication services.

**TABLE – IX : HAILSTORM 2012**

**CRITERIA**

**Slight : Sparse, usually small size and often mixed with rain**

**Moderate : Fall abundant enough to whiten ground**

**Heavy : Includes in least a proportion of large stones**

1.	1 Jan.	(a) Gwalior (Madhya Pradesh)	Moderate		Damage to crops reported.
		(b) Jaipur and Kota (Rajasthan)	Moderate		i) Hail stone weighing 300 gms. reported. ii) Damage to crops of about 10,000 bigha land reported.
2.	11 Jan.	Murshidabad (West Bengal)	Moderate		Extensive damage to crops reported.



<b>S.N.</b>	<b>Date/Period</b>	<b>Area Affected</b>	<b>Intensity</b>	<b>Casualties</b>	<b>Extent of damage</b>
3.	31 Mar.	Nilgiri (Tamil Nadu)	Heavy		i) Heavy deposit of hailstones reported. ii) Damage to crops of Doddabetta slopes reported.
4.	7 Apr.	Visakhapatnam and Warangal (Andhra Pradesh)	Moderate		i) Mango crops badly damaged. ii) Hailstones spread all over the road causing traffic disruption reported.
5.	12 & 22 Apr.	Shimla (Himachal Pradesh)	Moderate		Extensive damage to apple crops reported.
6.	25 Apr.	Mandi and Shimla (Himachal Pradesh)	Moderate		Damage to apple and other crops reported.
7.	12 May	Chamba and Kangra (Himachal Pradesh)	Moderate		Damage to Mango and other crops reported.
8.	10 & 11 Dec.	Saran and Siwan (Bihar)	Moderate		Damage to crops on some acres of cropland of about 50 villages reported.
9.	10 Dec.	Surguja (Chattisgarh)	Moderate		Damage to crops reported.

**TABLE - X : DROUGHT 2012**

**CRITERIA**

**Moderate : When seasonal (SW monsoon) rainfall departure  
is between -26% and -50%**

**Severe : When seasonal (SW monsoon) rainfall departure  
is less than -50%**

<b>S.N.</b>	<b>Area affected (Subdivision)</b>	<b>Seasonal rainfall departure (%)</b>	<b>Intensity</b>
1.	Nagaland, Manipur, Mizoram, Tripura	-31%	Moderate
2.	West Uttar Pradesh	-29%	Moderate
3.	Haryana, Chandigarh, Delhi	-39%	Moderate
4.	Punjab	-46%	Moderate
5.	Gujarat Region	-28%	Moderate
6.	Saurashtra & Kutch	-34%	Moderate
7.	Marathwada	-33%	Moderate
8.	North Interior Karnataka	-36%	Moderate

**TABLE XI – FLOODS AND HEAVY RAINS - 2012**

<b>S. N.</b>	<b>Date/Period</b>	<b>Area affected</b>	<b>Intensity [River(s)]</b>	<b>Casualties</b>	<b>Extent of damage</b>
<b>STATES</b>					
<b>ANDAMAN AND NICOBAR ISLANDS</b>					
1.	7 Jun.	North and Middle Andaman	Heavy rains		Damage to kachcha houses and household property reported.
2.	29 Jun.	North and Middle Andaman	Heavy rains		Damage to household property reported.
<b>ANDHRA PRADESH</b>					
1.	7 Apr.	Karnool, Medak and Prakasam	Heavy rains	One person died in Karnool.	<p><b>Karnool :</b></p> <ul style="list-style-type: none"> <li>i) Chilly crop worth lakhs of rupees damaged.</li> <li>ii) Extensive damage to mango</li> <li>iii) crops reported.</li> </ul> <p><b>Medak :</b></p> <ul style="list-style-type: none"> <li>i) Paddy crops in 2500 acres and Mango crops 600 acres badly damaged.</li> <li>ii) Reliance tower uprooted.</li> <li>iii) Vehicular traffic disrupted.</li> <li>iv) Low lying areas inundated.</li> <li>v) Number of electric poles uprooted.</li> </ul> <p><b>Prakasam :</b></p> <p>Extensive damage to plantain farms, turmeric and chilly plants reported.</p>

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
2.	9 Apr.	Warangal	Heavy rains		About 4500 plantations badly affected in Kambalakkad.
3.	21 Jul.	Hyderabad	Heavy rains	About 8 persons died due to house collapse.	i) Many houses damaged. ii) Rail/road traffic disrupted.
4.	4 Sep.	Krishna and Nizamabad	Heavy rains	4 persons died.	
5.	2 & 3 Oct.	East & West Godavari, Coastal Andhra Pradesh, Krishna, Prakasam, Rayalaseema and Telangana	Heavy rains	9 persons died.	About 5,000 hectares of paddy land submerged in East Godavari and 25,000 hectares in West Godavari.
6.	1-6 Nov.	Chittoor, East Godavari, Guntur, Hyderabad, Khammam, Krishna, Nellore, Prakasam, Visakhapatnam and West Godavari.	Heavy rains	About 50 persons died.	i) 30,973 houses damaged. ii) 8,37,619 hectares of crop damaged. iii) 53,693 hectares of horticulture damaged. iv) 44.5 hectares of sericulture damaged. v) Normal life paralysed.
7.	5 Dec.	Nellore	Heavy rains		About 2000 acres of paddy crops submerged.
*	<i>Whole year</i>			i) 61 human lives lost. ii) 1858 cattle lost.	i) 2.040 million population affected. ii) 30973 houses damaged. iii) Crops in 0.465 m.ha. affected.
<b>ARUNACHAL PRADESH</b>					
1.	26-29 Jun.	Changlang, Dibang Valley, Lohit and Upper Subansiri	Heavy rains		i) Extensive damage to standing crops reported. ii) About 50 houses inundated and few washed away. iii) Sipo and Sikut Hydroproject affected.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
2.	3 <sup>rd</sup> & 4 <sup>th</sup> week of Sep.	Most parts of Arunachal Pradesh	Heavy rains	9 persons died.	i) Extensive damage to standing crops reported. ii) About 1.5 lakhs of people from nearly 200 villages affected.
*	Whole year	Area affected 0.062 m.ha.		i) 68 human lives lost. ii) 4059 cattle lost.	i) 0.947 million population affected. ii) 1819 houses damaged. iii) Crops in 0.013 m.ha. affected.
<b>ASSAM</b>					
1.	22 May	Kamrup	Heavy rains		i) Damage to standing and kharif crops reported. ii) Nearly 20 villages inundated.
2.	4-8 Jun	Baksa, Jorhat and Nalbari	Flood (Brahmaputra and its tributaries)		i) Extensive damage to standing crops reported. ii) A vast area of the National Park of Kaziranga inundated. iii) Normal life paralysed in Indo-Bhutan border.
3.	11-18 Jun.	14 districts of Assam (Baksa and Barpeta are the worst affected.)	Flood (Brahmaputra and its tributaries)	6 persons died.	i) About 184 villages, 23923 people affected only in Barpeta district. ii) Extensive damage to crops reported.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
4.	22-30 Jun.	Entire Assam except North Cachar Hills	Flood (Brahmaputra and its tributaries)	<ul style="list-style-type: none"> <li>i) About 120 persons died.</li> <li>ii) About 540 livestock perished.</li> </ul>	<ul style="list-style-type: none"> <li>i) About 20,000 hectares of cropland affected.</li> <li>ii) About 2000 villages affected.</li> <li>iii) Landslide reported in Garchuk and Dhirenpara area.</li> <li>iv) Road/rail services affected at about 2800 places.</li> <li>v) Lumding-Badarpur railway services disrupted.</li> <li>vi) Kaziranga national park affected.</li> <li>vii) Number of bridges, roads damaged and embankments breached.</li> </ul>
5.	5 Jul.	Dhemaji	Heavy rains		<ul style="list-style-type: none"> <li>i) Damage to huge quantity of crops reported.</li> <li>ii) About 300 villages affected.</li> <li>iii) Many places inundated.</li> <li>iv) NH-52 badly affected.</li> <li>v) Road traffic disrupted.</li> </ul>
6.	10 Jul.	Lakhimpur	Heavy rains	3 persons including 2 children died.	<ul style="list-style-type: none"> <li>i) Many places inundated.</li> <li>ii) Road traffic disrupted.</li> </ul>
7.	15 - 17 Jul.	Bongaigaon, Barpeta, Dhemaji and Nagaon	Heavy rains		<ul style="list-style-type: none"> <li>i) About 100 villages affected.</li> <li>ii) Extensive damage to standing crops reported.</li> </ul>
8.	29 Jul.	Lakhimpur	Heavy rains	One person died.	<ul style="list-style-type: none"> <li>i) About 30 villages inundated.</li> <li>ii) Extensive damage to standing crops reported.</li> <li>iii) NH-52 submerged.</li> </ul>

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
9.	22-24 Aug.	Dhemaji, Kamrup, Lakhimpur and Sonitpur	Flood (Brahmaputra, Puthimari and Singra)		i) Damage to huge quantity of standing crops reported. ii) More than 30 villages inundated.
10.	12 Sep.	Dhemaji	Heavy rains		i) Extensive damage to standing crops reported. ii) More than 100 villages inundated. iii) District Dhemaji cut off from main land.
11.	3 <sup>rd</sup> & 4 <sup>th</sup> week of Sep.	Most parts of Assam	Flood (Brahmaputra and its tributaries)	i) About 23 persons died. ii) Many cattle heads perished.	i) Extensive damage to standing crops reported. ii) About 3,25,000 hectares of cropland affected. iii) About 30 lakhs of population from 2500 villages badly affected. iv) Kaziranga, Dibru Saikhowa national parks and Pobitora wild life sanctuary inundated. v) Majuli river island 90% submerged.
*	Whole year	Area affected 0.935 m.ha.		i) 144 human lives lost. ii) 6249 cattle lost.	i) 2.914 million population affected. ii) Crops in 0.328 m.ha. affected.
<b>BIHAR</b>					
1.	18 Jun.	Patna	Heavy rains	A woman and three children died and 2 others injured due to house collapse.	Rail/road/air traffic disrupted.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
2.	21 Sep.	Patna	Heavy rains		i) Damage to crops reported. ii) Few villages inundated. iii) Many people shifted to safer places.
*	<i>Whole year</i>			<i>8 human lives lost.</i>	i) <i>0.244 million population affected.</i> ii) <i>Crops in 0.008 m.ha. affected.</i>
<b>CHHATISGARH</b>					
1.	22 Jul.	Raipur and neighborhood	Heavy rains		About 1000 kachcha houses submerged.
2.	2 Aug.	Raipur	Heavy rains	One person died.	
3.	20 Aug.	Kanker	Heavy rains		About 70 kachcha houses damaged.
*	<i>Whole year</i>			i) <i>5 human lives lost.</i> ii) <i>65 cattle lost.</i>	
<b>GUJARAT</b>					
1.	1-31 Aug.	Parts of Gujarat	Heavy rains	3 persons died due to wall collapse and 7 others swept away.	Lakhs rupees of total damage due to flood reported.



S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
2.	1-30 Sep.	Parts of Gujarat	Heavy rains	2 persons died due to falling of tree, 6 others due to wall collapse and 14 others swept away.	Lakhs rupees of total damage due to flood reported.
*	Whole year	Area affected 0.610 m.ha.		i) 81 human lives lost. ii) 216 cattle lost.	i) 4.270 million population affected. ii) 2869 houses damaged. iii) Crops in 0.610 m.ha. affected.
<b>HARYANA</b>					
1.	22 Aug.	Fatehabad and Panchkula	Heavy rains		i) Standing crops in about 6000 hectares of 8 villages submerged due to flood water of Beas river. ii) About 8 houses demolished due to landslide.
2.	28 Aug.	Karnal, Sonipat and Yamunanagar	Heavy rains		i) Damage to household articles and property reported. ii) Normal life paralysed.
3.	15 & 16 Sep.	Panchkula	Heavy rains		i) Damage to paddy, standing crops reported. ii) Landslide reported. iii) About 30 kachcha houses collapsed in Chandikotla village. iv) Some residents shifted to safer places.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
<b>HIMACHAL PRADESH</b>					
1.	7-11 Jul.	Shimla, Sirmaur and Solan	Heavy rains	9 persons washed away and 3 persons buried alive in landslide.	i) Landslides reported. ii) Shimla-kalka train services disrupted.
2.	3 & 4 Aug.	Kullu and Manali	Heavy rains	One person washed away.	i) Landslides reported. ii) Many structures, bridges washed away causing disruption in transport services. iii) Damage to Manali-Rohtang road reported.
3.	18 & 19 Aug.	Mandi, Shimla and Solan	Heavy rains	One person washed away.	i) Landslides reported causing disruption in transport services. ii) Houses, vehicles washed away in Barot village.
4.	20-25 Aug.	Chamba, Kangra and Kinnur	Heavy rains	6 persons died in different incidents.	i) Landslides reported. ii) Many houses collapsed. iii) One bridge collapsed. iv) Disruption in transport services reported.
*	<i>Whole year</i>			i) <i>27 human lives lost.</i> ii) <i>126 cattle lost</i>	i) <i>0.003 million population affected.</i> ii) <i>1750 houses damaged.</i>

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
<b>JAMMU &amp; KASHMIR</b>					
1.	18 Feb.	Ramban	Heavy rains		Landslide reported.
2.	22 Feb.	Poonch	Heavy rains		i) Landslide reported. ii) Few houses damaged.
3.	22 May.	Badgam	Heavy rains		Cloudburst reported.
4.	2-6 Aug.	Different parts of Jammu	Heavy rains		Few kachcha houses collapsed and some damaged.
5.	19-25 Aug.	Bandipora, Jammu, Kathua, Rajouri and Udhampur	Heavy rains		i) About 30 different structures damaged in Gurez. ii) Landslides reported. iii) Trees/electricity poles uprooted disrupting road traffic.
<b>JHARKHAND</b>					
1.	14 Aug.	Bokaro, Hazaribagh and Ranchi	Heavy rains	5 persons died.	i) Low lying areas flooded. ii) Few of houses collapsed.
*	Whole year	Area affected 0.041 m.ha.		9 human lives lost.	i) 0.142 million population affected. ii) 3041 houses damaged. iii) Crops in 0.041m.ha. affected.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
<b>KARNATAKA</b>					
1.	6 & 7Aug.	Kodagu, Shimoga and Udupi	Heavy rains	4 persons died.	i) Low lying areas flooded. ii) Trees/electricity poles uprooted disrupting road traffic. ii) Electricity supply disrupted.
2.	25 Aug.	Bengaluru	Heavy rains	One person died.	
*	Whole year			i) 53 human lives lost. ii) 14 cattle lost.	645 houses damaged.
<b>KERALA</b>					
1.	7 Apr.	Kollam	Heavy rains		Damage to the crops in lakhs of rupees reported.
2.	9 Apr.	Wayanad	Heavy rains		i) Approx. 10,000 banana and 500 rubber plantations damaged. ii) 4 houses damaged in Punalur.
3.	23 Apr.	Pathanamthitta	Heavy rains	2 persons died in Pandalam town.	i) Extensive damage to rubber, topioca, banana plantations reported. ii) Landslide reported. iii) Several trees uprooted.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
4.	24-27 Apr.	Thrissur	Heavy rains	2 persons died.	i) About 800 acres of paddy crop land and 2000 tons of paddy crops damaged. ii) Damage to about 200 kachcha houses reported.
5.	6 Jun.	Wayanad	Heavy rains		About 600 plantations damaged.
6.	12 Jun.	Kottayam	Heavy rains	About 40 children and few teachers injured.	A huge tree uprooted causing damage to school building.
7.	2 & 3 Jul.	Thiruvananthapuram	Heavy rains	3 persons died, other injured.	i) 18 houses completely and 70 houses partially damaged. ii) Extensive damage to agricultural land reported. iii) Asbestos roofs of Malayankizhu Govt. Girls School blown away.
8.	28 Jul.	Wayanad	Heavy rains		Damage to Banana plantations worth about 2 lakh rupees reported.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
9.	4-8 Aug.	Kannur, Kozhiokode and Wayanad	Heavy rains	14 persons died and 3 others missing.	<ul style="list-style-type: none"> <li>i) Extensive damage to several houses, shops, school buildings, Govt. offices and hospitals in the Iritty town of Kannur reported.</li> <li>ii) About 300 houses inundated in Kannur.</li> <li>iii) 2 pumping stations of Kerala Water Authority flooded causing damage to crops.</li> <li>iv) Total loss worth about 3 crores rupees estimated excluding damage to crops.</li> <li>v) Number of houses completely/partially damaged and about 100 persons shifted to safer places.</li> <li>vi) Disruption in traffic and power supply reported.</li> <li>vii) 2 bridges connecting the region to Kuttiyadi and Mananthavady submerged.</li> </ul>
10.	17 & 18 Aug.	Ernakulam, Idukki, Kottayam, Pathanamthitta and Thiruvananthapuram.	Heavy rains	5 persons died, 2 others missing and 3 others injured.	<ul style="list-style-type: none"> <li>i) Landslide reported.</li> <li>ii) Few houses washed away.</li> <li>iii) Extensive damage to rubber trees and standing crops of banana, coconut, coffee and areca nut on 6 hectares of area affected.</li> <li>iv) Extensive loss to property and agricultural department reported.</li> </ul>
11.	4 Sep.	Kollam	Heavy rains		<ul style="list-style-type: none"> <li>i) About 20 houses partially damaged.</li> <li>ii) Power supply disrupted as trees uprooted.</li> <li>iii) Houses on the banks flooded.</li> <li>iv) Fibre boat damaged.</li> <li>v) Loss worth Rs. 88,468 estimated.</li> </ul>

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
12.	1 Nov.	Ernakulam, Kollam and Thiruvananthapuram	Heavy rains		<ul style="list-style-type: none"> <li>i) About 40 houses partially damaged.</li> <li>ii) Loss of Agricultural property reported.</li> <li>iii) Many trees uprooted causing disruption in power/telecommunication services.</li> <li>iv) Several low lying areas and roads inundated affecting normal life.</li> <li>v) Damage to property worth Rs. 7.5 lakhs reported.</li> </ul>
13.	11 Nov.	Thiruvananthapuram	Heavy rains		<ul style="list-style-type: none"> <li>i) Hundreds of rubber trees uprooted.</li> <li>ii) Low lying areas inundated.</li> <li>iii) Number of trees uprooted causing disruption in road/power/ telecommunication services.</li> <li>iv) 33 KV substation damaged.</li> <li>v) Thampanoor railway station, bus stand, KSRTC garage flooded.</li> </ul>
*	Whole year	Area affected 0.002 m.ha.		<ul style="list-style-type: none"> <li>i) 47 human lives lost.</li> <li>ii) 619 cattle lost.</li> </ul>	<ul style="list-style-type: none"> <li>i) 0.003 million population affected.</li> <li>ii) 2455 houses damaged.</li> <li>iii) Crops in 0.002 m.ha. affected.</li> </ul>
<b>MADHYA PRADESH</b>					
1.	7 Aug.	Bhopal and Chindwada	Heavy rains	<ul style="list-style-type: none"> <li>i) 3 persons died due to wall collapse in Bhopal.</li> <li>ii) One person swept away in Chindwada.</li> </ul>	<ul style="list-style-type: none"> <li>i) Low lying areas and crop land inundated.</li> <li>ii) Trees/electric poles uprooted.</li> </ul>

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
2.	28 Aug.	Sagar	Heavy rains	One person swept away.	Low lying areas inundated.
3.	3-5 Sep.	Indore, Sehore and Shajapur	Heavy rains	2 persons swept away in Choral river and a woman and a child swept away in Sip river from Nasarullaganj town.	
*	Whole year	Area affected 0.037 m.ha.		i) 47 human lives lost. ii) 355 cattle lost.	i) 22222 houses damaged. ii) Crops in 0.037 m.ha. affected
<b>MAHARASHTRA</b>					
1.	9 Jun.	Mumbai	Heavy rains		A building collapsed.
2.	29 Jun.	Mumbai	Heavy rains		i) Few check dams collapsed. ii) Water logging and damaged roads disrupted road and rail traffic.
3.	30 Jul.	Nagpur	Heavy rains		Nearly 300 persons affected.
4.	18 Aug.	Thane	Heavy rains		A building collapsed.
5.	2 <sup>nd</sup> week of Sep.	Akola, Amraoti, Nagpur and Wardha	Heavy rains		i) Damage to crops reported. ii) Low lying areas submerged. iii) Trees uprooted, vehicular traffic disrupted.



S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
<b>PUNJAB</b>					
1.	24-26 May	Bhatinda, Jalandhar, Moga and Patiala.	Heavy rains		Extensive damage to standing crops and grains in go downs reported.
2.	20 Aug.	Mohali	Heavy rains		Household articles in sectors I, III, IV, V, B-1 damaged.
3.	12 Sep.	Patiala	Heavy rains	One person died due to wall collapse.	Damage to household articles and property reported.
4.	16 Sep.	Amritsar	Heavy rains		Extensive damage to paddy and standing crops reported.
*	<i>Whole year</i>	<i>Area affected 0.003 m.ha.</i>		<i>i) 8 human lives lost. ii) 3034 cattle lost.</i>	<i>i) 149 houses damaged. ii) Crops in 0.003 m.ha. damaged.</i>
<b>RAJASTHAN</b>					
1.	21 Aug.	Dausa		2 persons died in a house collapse.	
*	<i>Whole year</i>	<i>Area affected 0.416 m.ha.</i>		<i>i) 59 human lives lost. ii) 152 cattle lost.</i>	<i>i) 2.424 million population affected. ii) 12881 houses damaged. iii) Crops in 0.292 m.ha. damaged.</i>

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
<b>SIKKIM</b>					
1.	1 Sep.	South Sikkim	Heavy rains	5 persons died.	i) Landslide reported. ii) Damage to several houses and school building reported.
2.	21 Sep.	North Sikkim	Flood (Dikchu, Lachen, Lachung, Rangpo and Singtam)	20 persons died and 5 others injured.	i) A triggered series of landslides reported. ii) Many kachcha houses washed away. iii) Nearly 30km of highway in north Sikkim along Lachen river washed away. iv) Low lying areas flooded.
*	Whole year	Area affected 0.001 m.ha.		i) 41 human lives lost. ii) 305 cattle lost.	i) 0.310 million population affected. ii) 2780 houses damaged. iii) Crops in 0.001 m. ha. damaged.
<b>TAMIL NADU</b>					
1.	20 & 21 Oct.	Many parts of Tamil Nadu.	Heavy rains		<b><u>Coastal and South interior districts:</u></b> 38 huts completely and 123 huts partially damaged. <b><u>Cuddalore, Kanyakumari, Nagapattinam, Theni and Vellore:</u></b> i) Many acres of paddy fields submerged. ii) Nearly 5000 acres of samba crops submerged. <b><u>Salem:</u></b> About 26 houses damaged. <b><u>Nilgiris:</u></b> i) Landslides reported. ii) Railway track between Conoor and Ooty affected.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
2.	1 & 2 Nov.	Chennai, Thiruvarur and Vellore	Heavy rains		i) 415 huts completely, 3283 partially damaged. ii) Paddy crops in 4656 hectares submerged.
<b>TRIPURA</b>					
1.	4 Jun.	North Tripura	Heavy rains	One person died.	Number of houses damaged.
<b>UTTAR PRADESH</b>					
1.	18 Sep.	Sultanpur	Heavy rains	One woman and 2 children died due to wall collapse.	
*	<i>Whole year</i>			i) 105 human lives lost. ii) 70 cattle lost.	i) 0.684 million population affected. ii) 5533 houses damaged. iii) Crops in 0.124 m. ha. damaged.

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
<b>UTTARAKHAND</b>					
1.	4 Aug.	Chamoli	Heavy rains (Cloud burst)	<ul style="list-style-type: none"> <li>i) One child washed away.</li> <li>ii) 2 children died in a house collapse.</li> <li>iii) 3 jawans of the fire brigade and 2 others died in Gangitri.</li> <li>iv) 19 labours missing from Assi Ganga Hydel project.</li> </ul>	<ul style="list-style-type: none"> <li>i) Landslides reported.</li> <li>ii) About 30 houses washed away.</li> <li>iii) Gangotri bridge collapsed.</li> <li>iv) Pilgrims of Badrinath-Kedarnath stranded.</li> <li>v) About 250 families shifted to safer places.</li> </ul>
2.	13 Sep.	Rudraprayag	Heavy rains (Cloud burst)	<ul style="list-style-type: none"> <li>i) 7 persons died in house collapse.</li> <li>ii) About 40 persons missing.</li> <li>iii) About 15 others injured.</li> </ul>	<ul style="list-style-type: none"> <li>i) In Ukhimath area about 12 kachcha houses collapsed from 8 villages.</li> <li>ii) Landslides reported at national highways Hrishikesh-Badrinath and Hrishikesh-Gangotri.</li> </ul>
*	<i>Whole year</i>			<ul style="list-style-type: none"> <li>i) 135 human lives lost.</li> <li>ii) 705 cattle lost.</li> </ul>	<ul style="list-style-type: none"> <li>i) 0.008 million population affected.</li> <li>ii) 940 houses damaged.</li> </ul>

S. N.	Date/Period	Area affected	Intensity [River(s)]	Casualties	Extent of damage
<b>WEST BENGAL</b>					
1.	15 Jul.	Jalpaiguri	Heavy rains	4 persons died.	i) Damage to crops reported. ii) Kachcha houses damaged. iii) Many areas inundated.
*	<i>Whole year</i>			i) 29 human lives lost. ii) 2200 cattle lost.	i) 0.529 million population affected. ii) 49132 houses damaged. iii) 0.012 m. ha. crops damaged.
<b>UNION TERRITORY</b>					
1.	20 & 21 Oct.	Puducherry	Heavy rains		i) 2 buildings collapsed due to soil erosion. ii) A fiber boat damaged.
*	<i>Whole year</i>	<i>0.008 m.ha. area affected.</i>		<i>11 cattle lost.</i>	i) 77 houses damaged. ii) 0.008 m.ha. crops damaged.

\* As per data available from Central Water Commission, total damage for the whole season for entire state has been incorporated.

S. N.	Date/Period	Area affected	Intensity	Casualties	Extent of damage
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TABLE – XII : CYCLONIC STORM 2012

During 2012, one cyclonic storm (Murjan) formed over the Arabian Sea and the other cyclonic storm (Nilam) formed over the Bay of Bengal. Out of these only Nilam caused some damage, details of the same are out lined below:-

**BAY CYCLONE**

1.	28 Oct. -1 Nov.	<p><b>Formation</b> Near Lat. 9.5° N/ Long. 86.0° E, at about 0600 UTC of 28<sup>th</sup> Oct., over the southeast Bay of Bengal.</p> <p><b>Landfall</b> It crossed the north Tamil Nadu coast south of Chennai near Mahabalipuram during 1030 and 1130 UTC of 31<sup>st</sup> Oct.</p> <p><b>Dissipation</b> Weakened into a well marked low pressure area over south interior Karnataka and adjoining areas of Rayalaseema and neighbourhood in the morning of 2<sup>nd</sup>.</p>	Cyclonic Storm (Nilam)	<p><b>Andhra Pradesh :</b> 44 persons died.</p> <p><b>Tamil Nadu :</b> i) 17 persons died. ii) 298 livestock perished.</p>	<p><b>Andhra Pradesh :</b> i) Crop land affected 5,00,000 hectares. ii) Street light damaged 10,882. iii) Economical loss Rs. 200 crores reported.</p> <p><b>Tamil Nadu :</b> i) Kachcha houses fully damaged : 3283. ii) Kachcha houses partially damaged 242. iii) Paddy cropland affected 4646 hectares. iv) No. of electric poles uprooted 5000.</p>
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