

#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR SCIENCE AND TECHNOLOGY AND EARTH

**SCIENCES (FAX NO.23316745)** 

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 2015 hours IST Dated: 23-11-2013

Bulletin No.: BOB07/2013/01

Sub: Depression over Andaman Sea: Pre-cyclone watch for Andaman & Nicobar islands

Latest satellite imagery and observations indicate that a depression has formed over south Andaman Sea and lay centred at 1730 hrs IST of today, the 23<sup>rd</sup> November 2013 near latitude 8.5°N and longitude 96.5°E, about 550 km south-southeast of Portblair. The system would intensify into a deep depression during next 12 hrs and further into a cyclonic storm in subsequent 24 hrs. The system would move northwestward and cross Andaman & Nicobar islands beteen Hurt Bay and Long island, close to Port Blair as a cyclonic storm around night of 24<sup>th</sup> Nov. 2013. It would then emerge into southeast Bay of Bengal, intensify further and continue to move northwestwards during subsequent 48 hrs.

#### Warning for Andaman & Nicobar island

### (i) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 48 hrs.

# (ii) Squally/Gale Winds

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andaman & Nicobar island. The wind speed would gradually increase and become 80-90 kmph gusting to 100kmph from 24<sup>th</sup> evening along and off this coast.

# (iii) Sea condition

Sea condition will be rough to very rough along and off Andaman & Nicobar Island becoming high from 24<sup>th</sup> evening.

# (iv) Damage expected due to a cyclonic storm over Andaman & Nicobar islands

Damage to thatched huts. Breaking of tree branches and uprooting trees causing minor damage to power and communication.

# (v) Action Suggested

Total suspension of fishing operations.

The next bulletin will be issued at 0230 hrs IST of 24th November, 2013.

(M Mohapatra) Scientist-E Ph:011-24631913

CC: DDGM (WF) Pune/ ACWC Kolkata/ACWC Chennai/ Mumbai, CWC Visakhapatanam/Bhubaneswar/Command MO Mumbai (022-22630084) /M.O. Port Blair.



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CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0230 hours IST Dated: 24-11-2013

Bulletin No.: BOB07/2013/02

# Sub: Deep Depression over Andaman Sea: Cyclone Alert for Andaman & Nicobar islands

The depression over south Andaman Sea moved northwestward, intensified into deep depression and lay centred at 2330 hrs IST 23<sup>rd</sup> November 2013 near latitude 9.0°N and longitude 96.0°E, about 470 km south-southeast of Port Blair. The system would intensify into a cyclonic storm during 24 hrs. The system would move northwestward and cross Andaman & Nicobar islands between Hurt Bay and Long island, close to Port Blair around night of 24<sup>th</sup> Nov. 2013. It would then emerge into southeast Bay of Bengal, intensify further and continue to move northwestwards during subsequent 48 hrs.

Track and intensity forecasts of the system are given in the table below.				
Date/Time(IST)	Position	Maximum sustained surface	Category	
	(Lat. ⁰N/ long. ºE)	wind speed (kmph)	·	
23-11-2013/2330	9.0/96.0	55-65GUSTING TO 75	DEEP DEPRESSION	
24-11-2013/0530	9.5/95.3	55-65GUSTING TO 75	DEEP DEPRESSION	
24-11-2013/1130	10.0/94.5	55-65GUSTING TO 75	DEEP DEPRESSION	
24-11-2013/1730	10.6/93.5	65-75 GUSTING TO 85	CYCLONIC STORM	
24-11-2013/2330	11.0/92.7	75-85 GUSTING TO 95	CYCLONIC STORM	
25-11-2013/1130	11.7/91.3	85-95 GUSTING TO 105	CYCLONIC STORM	
25-11-2013/2330	12.5/89.5	90-100 GUSTING TO 110	SEVERE CYCLONIC	
			STORM	
26-11-2013/1130	13.1/87.9	90-100 GUSTING TO 110	SEVERE CYCLONIC	

			STORM
26-11-2013/2330	13.9/86.3	90-100 GUSTING TO 110	SEVERE CYCLONIC STORN
27-11-2013/1130	14.8/84.9	90-100 GUSTING TO 110	SEVERE CYCLONIC STORN
27-11-2013/2330	15.8/83.5	90-100 GUSTING TO 110	SEVERE CYCLONIC STORN
28-11-2013/1130	16.6/82.4	90-100 GUSTING TO 110	SEVERE CYCLONIC STORN
28-11-2013/2330	17.9/80.8	75-85 GUSTING TO 95	CYCLONIC STORM

# (vi) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 48 hrs.

# (vii) Squally/Gale Winds

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andaman & Nicobar island. The wind speed would gradually increase and become 80-90 kmph gusting to 100kmph from 24<sup>th</sup> evening along and off this coast.

#### (viii) Sea condition

Sea condition will be rough to very rough along and off Andaman & Nicobar Island becoming high from 24<sup>th</sup> evening.

# (ix) Damage expected due to a cyclonic storm over Andaman & Nicobar islands

Damage to thatched huts. Breaking of tree branches and uprooting trees causing minor damage to power and communication.

#### (x) Action Suggested

Total suspension of fishing operations.

The next bulletin will be issued at 0830 hrs IST of tomorrow, the 24th November, 2013.

(Duty Officer) Ph:011-24631913

CC: DDGM (WF) Pune/ ACWC Kolkata/ACWC Chennai/ Mumbai, CWC Visakhapatanam/Bhubaneswar/Command MO Mumbai (022-22630084) /M.O. Port Blair.



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SECRETARY, DST (Fax No. 26863847/-2418)

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**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

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CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0830 hours IST Dated: 24-11-2013

Bulletin No.: BOB07/2013/03 (Modified)

Sub: Cyclonic storm 'LEHAR' over Andaman Sea: Cyclone warning for Andaman & Nicobar Islands (Orange Message)

The deep depression over south Andaman Sea and neighbourhood moved northwestward, intensified into a cyclonic storm **£EHAR**' and lay centred at 0530 hrs IST of today, the 24 November 2013, over Andaman Sea near latitude 10.0°N and longitude 95.0°E, about 300 km south-southeast of Port Blair. The system would move northwestward and cross Andaman & Nicobar Islands between Hut Bay and Long Island, close to Port Blair around night of 24 November 2013. It would then emerge into southeast Bay of Bengal, intensify further gradually into a very severe cyclonic storm and to move west-northwestwards towards Andhra Pradesh coast.

Date/Time(IST)		Maximum sustained surface	Category
	(Lat. ⁰N/ long. ºE)	wind speed (kmph)	
24-11-2013/0530	10.0/95.0	65-75 GUSTING TO 85	CYCLONIC STORM
24-11-2013/1130	10.5/94.4	70-80 GUSTING TO 90	CYCLONIC STORM
24-11-2013/1730	11.0/93.8	80-90 GUSTING TO 100	CYCLONIC STORM
24-11-2013/2330	11.5/93.0	90-100 GUSTING TO 110	CYCLONIC STORM
25-11-2013/0530	12.0/92.2	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
25-11-2013/1730	12.5/90.6	110-120 GUSTING TO 130	VERY SEVERE CYCLONIC

			STORM
26-11-2013/0530	13.0/89.1	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.5/87.6	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	14.4/86.0	140-150 GUSTING TO 160	/ERY SEVERE CYCLONIC STORM
27-11-2013/1730	15.5/84.5	160-170 GUSTING TO 185	/ERY SEVERE CYCLONIC STORM
28-11-2013/0530	16.5/83.0	170-180 GUSTING TO 195	/ERY SEVERE CYCLONIC STORM
28-11-2013/1730	17.5/81.5	120-130 GUSTING TO 140	/ERY SEVERE CYCLONIC STORM
29-11-2013/0530	18.5/80.5	70-80 GUSTING TO 90	CYCLONIC STORM

#### (xi) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 48 hrs.

#### (xii) Squally/Gale Winds

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andaman & Nicobar Islands. The wind speed would gradually increase and become 80-90 kmph gusting to 100 kmph from 24<sup>th</sup> evening along and off this coast.

#### (xiii) Storm Surge

Storm surge of about 1 to 1.5m height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

#### (xiv) Sea condition

Sea condition will be rough to very rough along and off Andaman & Nicobar Island becoming high from 24<sup>th</sup> evening.

# (xv) Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Damage to thatched huts. Breaking of tree branches and uprooting trees causing minor damage to power and communication.

#### (xvi) Action Suggested

Total suspension of fishing operations.

The next bulletin will be issued at 1130 hrs IST of today, the 24th November, 2013.

(M. Mohapatra) Scientist-E Ph:011-24631913

CC: DDGM (WF) Pune/ ACWC Kolkata/ACWC Chennai/ Mumbai, CWC Visakhapatanam/Bhubaneswar/Command MO Mumbai (022-22630084) /M.O. Port Blair.



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CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1130 hours IST Dated: 24-11-2013

Bulletin No.: BOB07/2013/04

# Sub: Cyclonic storm 'LEHAR' over Andaman Sea: Cyclone warning for Andaman & Nicobar Islands (Orange Message)

The cyclonic storm **±EHAR**' over Andaman Sea remained practically stationary and lay centred at 0830 hrs IST of today, the 24 November 2013 near latitude 10.0°N and longitude 95.0°E, about 300 km south-southeast of Port Blair. The system would move northwestward and cross Andaman & Nicobar Islands between Hut Bay and Long Island, close to Port Blair around night of today, the 24<sup>th</sup> November 2013. It would then emerge into southeast Bay of Bengal, intensify further gradually into a very severe cyclonic storm. It would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)		Maximum sustained surface	Category
	(Lat. ⁰N/ long. ºE)	wind speed (kmph)	
24-11-2013/0830	10.0/95.0	65-75 GUSTING TO 85	CYCLONIC STORM
24-11-2013/1130	10.5/94.5	70-80 GUSTING TO 90	CYCLONIC STORM
24-11-2013/1730	11.0/93.8	80-90 GUSTING TO 100	CYCLONIC STORM
24-11-2013/2330	11.5/93.0	90-100 GUSTING TO 110	CYCLONIC STORM
25-11-2013/0530	12.0/92.2	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
25-11-2013/1730	12.5/90.6	110-120 GUSTING TO 130	VERY SEVERE CYCLONIC
			STORM

26-11-2013/0530	13.0/89.1	120-130 GUSTING TO 140 VERY SEVERE CYCLON	10
26-11-2013/0530	13.0/69.1	120-130 GOSTING TO 140 VERT SEVERE CTCLON	IC
		STORM	
26-11-2013/1730	13.5/87.6	130-140 GUSTING TO 150 VERY SEVERE CYCLON	IC
		STORM	
27-11-2013/0530	14.4/86.0	140-150 GUSTING TO 160/ERY SEVERE CYCLONIC S	TOR
27-11-2013/1730	15.5/84.5	160-170 GUSTING TO 185/ERY SEVERE CYCLONIC S	TOR
28-11-2013/0530	16.5/83.0	170-180 GUSTING TO 195/ERY SEVERE CYCLONIC S	TOR
28-11-2013/1730	17.5/81.5	120-130 GUSTING TO 140/ERY SEVERE CYCLONIC S	TORI
29-11-2013/0530	18.5/80.5	70-80 GUSTING TO 90 CYCLONIC STORM	<u>-</u>

### (xvii)Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 48 hrs.

## (xviii) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands. The wind speed would gradually increase and become 80-90 kmph gusting to 100 kmph from 24<sup>th</sup> evening along and off this coast.

#### (xix) Storm Surge

Storm surge of about 1 to 1.5 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

#### (xx) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands becoming high to very high from 24<sup>th</sup> November evening.

# (xxi) Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Damage to thatched huts. Breaking of tree branches and uprooting trees causing minor damage to power and communication.

#### (xxii)Action Suggested

Total suspension of fishing operations.

The next bulletin will be issued at 1430 hrs IST of today, the 24th November, 2013.

(M. Mohapatra) Scientist-E Ph:011-24631913

CC: DDGM (WF) Pune/ ACWC Kolkata/ACWC Chennai/ Mumbai, CWC Visakhapatanam/Bhubaneswar/Command MO Mumbai (022-22630084) /M.O. Port Blair.



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CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1400 hours IST Dated: 24-11-2013

Bulletin No.: BOB07/2013/05

Sub: Cyclonic storm 'LEHAR' over Andaman Sea: Cyclone warning for Andaman & Nicobar Islands (Orange Message)

The cyclonic storm **ŁEHAR'** over Andaman Sea moved northwestwards and lay centred at 1130 hrs IST of today, the 24 November 2013 near latitude 10.5°N and longitude 94.5°E, about 230 km east-southeast of Port Blair. The system would intensify further, move west-northwestwards and cross Andaman & Nicobar Islands, close to Port Blair around night of today, the 24<sup>th</sup> November 2013. It would then emerge into southeast Bay of Bengal, intensify further gradually into a very severe cyclonic storm. It would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)		Maximum sustained surface	Category
	(Lat. ⁰N/ long. ºE)	wind speed (kmph)	
24-11-2013/1130	10.5/94.5	70-80 GUSTING TO 90	CYCLONIC STORM
24-11-2013/1730	10.7/93.7	80-90 GUSTING TO 100	CYCLONIC STORM
24-11-2013/2330	11.2/93.0	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
25-11-2013/0530	11.8/92.1	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
25-11-2013/1130	12.2/91.5	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM

25-11-2013/2330	12.7/90.0	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1130	13.2/88.5	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/2330	13.7/87.1	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.3/85.6	150-160 GUSTING TO 175/	ERY SEVERE CYCLONIC STORM
27-11-2013/2330	15.4/84.0	170-180 GUSTING TO 200/	ERY SEVERE CYCLONIC STORM
28-11-2013/1130	16.5/82.5	170-180 GUSTING TO 200/	ERY SEVERE CYCLONIC STORM
28-11-2013/2330	17.5/81.0	120-130 GUSTING TO 140/	ERY SEVERE CYCLONIC STORM
29-11-2013/1130	18.5/80.0	60-70 GUSTING TO 80	CYCLONIC STORM

#### (xxiii) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 48 hrs.

#### (xxiv) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands. The wind speed would gradually increase and become 80-90 kmph gusting to 100 kmph from 24<sup>th</sup> evening along and off this coast.

## (xxv) Storm Surge

Storm surge of about 1 to 1.5 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

#### (xxvi) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands becoming high to very high from 24<sup>th</sup> November evening.

# (xxvii) Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of large avenue trees. Flooding of escape routes.

## (xxviii) Action Suggested

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.

The next bulletin will be issued at 1730 hrs IST of today, the 24th November, 2013.

(M. Mohapatra) Scientist-E Ph:011-24631913

CC: DDGM (WF) Pune/ ACWC Kolkata/ACWC Chennai/ Mumbai, CWC Visakhapatanam/Bhubaneswar/Command MO Mumbai (022-22630084) /M.O. Port Blair.



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CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1700 hours IST Dated: 24-11-2013

Bulletin No.: BOB07/2013/06

# Sub: Cyclonic storm 'LEHAR' over Andaman Sea: Cyclone warning for Andaman & Nicobar Islands (Orange Message)

The cyclonic storm **ŁEHAR**' over Andaman Sea moved west-northwestwards with a speed of 20 kmph during past six hours and lay centred at 1430 hrs IST of today, the 24 November 2013 near latitude 10.5°N and longitude 94.0°E, about 200 km east-southeast of Port Blair. The system would intensify further, move west-northwestwards and cross Andaman & Nicobar Islands, close to Port Blair around night of today, the 24<sup>th</sup> November 2013. It would then emerge into southeast Bay of Bengal, intensify further gradually into a very severe cyclonic storm. It would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)		Maximum sustained surface	Category
	(Lat. ⁰N/ long. ºE)	wind speed (kmph)	
24-11-2013/1430	10.5/94.0	70-80 GUSTING TO 90	CYCLONIC STORM
24-11-2013/1730	10.7/93.7	80-90 GUSTING TO 100	CYCLONIC STORM
24-11-2013/2330	11.2/93.0	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
25-11-2013/0530	11.8/92.1	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
25-11-2013/1130	12.2/91.5	110-120 GUSTING TO 130	
25-11-2013/2330	12.7/90.0	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1130	13.2/88.5	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM

26-11-2013/2330	13.7/87.1	140-150 GUSTING TO 165 VERY SEVERE CYCLONIC
		STORM
27-11-2013/1130	14.3/85.6	150-160 GUSTING TO 175/ERY SEVERE CYCLONIC STORM
27-11-2013/2330	15.4/84.0	170-180 GUSTING TO 200/ERY SEVERE CYCLONIC STORM
28-11-2013/1130	16.5/82.5	170-180 GUSTING TO 200/ERY SEVERE CYCLONIC STORM
28-11-2013/2330	17.5/81.0	120-130 GUSTING TO 140/ERY SEVERE CYCLONIC STORM
29-11-2013/1130	18.5/80.0	60-70 GUSTING TO 80 CYCLONIC STORM

#### (xxix) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 48 hrs.

# (xxx)Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands. The wind speed would gradually increase and become 80-90 kmph gusting to 100 kmph from 24<sup>th</sup> evening along and off this coast.

### (xxxi) Storm Surge

Storm surge of about 1 to 1.5 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

#### (xxxii) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands becoming high to very high from 24<sup>th</sup> November evening.

# (xxxiii) Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of large avenue trees. Flooding of escape routes.

#### (xxxiv) Action Suggested

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.

The next bulletin will be issued at 1730 hrs IST of today, the 24th November, 2013.

(M. Mohapatra) Scientist-E Ph:011-24631913

CC: DDGM (WF) Pune/ ACWC Kolkata/ACWC Chennai/ Mumbai, CWC Visakhapatanam/Bhubaneswar/Command MO Mumbai (022-22630084) /M.O. Port Blair.



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1930 hours IST Dated: 24-11-2013

Bulletin No.: BOB07/2013/07

Sub: Cyclonic storm 'LEHAR' over Andaman Sea: Cyclone warning for Andaman & Nicobar Islands (Orange Message)

The cyclonic storm **ŁEHAR**' over Andaman Sea moved west-northwestwards with a speed of 17 kmph during past six hours and lay centred at 1730 hrs IST of today, the 24 November 2013 near latitude 11.0°N and longitude 93.5°E, about 120 km east-southeast of Port Blair. The system would intensify further, move west-northwestwards and cross Andaman & Nicobar Islands, close to Port Blair around midnight of today, the 24<sup>th</sup> November 2013. It would then emerge into southeast Bay of Bengal, intensify further gradually into a very severe cyclonic storm. It would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)	Position	Maximum sustained surface	Category
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (kmph)	
24-11-2013/1730	11.0/93.5	80-90 GUSTING TO 100	CYCLONIC STORM
24-11-2013/2330	11.5/92.7	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
25-11-2013/0530	12.0/92.0	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
25-11-2013/1130	12.4/91.3	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1730	12.8/90.6	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/0530	13.3/89.1	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.8/87.6	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM

27-11-2013/0530	14.6/86.1	160-170 GUSTING TO 185 VERY SEVERE CYCLONIC
		STORM
27-11-2013/1730	15.4/84.5	170-180 GUSTING TO 195/ERY SEVERE CYCLONIC STORI
28-11-2013/0530	16.2/83.0	170-180 GUSTING TO 200/ERY SEVERE CYCLONIC STORI
28-11-2013/1730	17.2/81.5	140-150 GUSTING TO 165/ERY SEVERE CYCLONIC STORI
29-11-2013/0530	18.0/80.5	80-90 GUSTING TO 100 CYCLONIC STORM
29-11-2013/1730	19.0/79.5	50-60 GUSTING TO 70 DEEP DEPRESSION

#### (xxxv) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 36 hrs.

# (xxxvi) Squally/Gale Winds

Gale winds speed reaching 90-100 kmph gusting to 110 kmph would prevail along and off Andaman & Nicobar Islands during next 24 hrs

#### (xxxvii) Storm Surge

Storm surge of about 1 to 1.5 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

## (xxxviii) Sea condition

Sea condition will be high to very high along and off Andaman & Nicobar Islands during next 24 hrs.

# Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of large avenue trees. Flooding of escape routes.

# (xxxix) Action Suggested

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.

The next bulletin will be issued at 2330 hrs IST of today, the 24th November, 2013.

(M. Mohapatra) Scientist-E Ph: 011-24631913



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL. DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0230 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/09

# Sub: Cyclonic storm 'LEHAR' over Andaman Sea: Cyclone warning for Andaman & Nicobar Islands (Orange Message)

The cyclonic storm **±EHAR**' over Andaman Sea moved slightly north-westward and lay centred at 2330 hrs IST of yesterday, the 24th November 2013 near latitude 11.5°N and longitude 93.0°E, about 40 km southeast of Port Blair. The system would intensify further, move west-northwestwards and cross Andaman & Nicobar Islands, close to Port Blair around early morning of today, the 25<sup>th</sup> November 2013. It would then emerge into southeast Bay of Bengal, intensify further gradually into a very severe cyclonic storm. It would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)	Position	Maximum sustained surface	Category
	(Lat. ⁰N/ long. ºE)	wind speed (kmph)	
24-11-2013/2330	11.5/93.0	80-90 GUSTING TO 100	CYCLONIC STORM
25-11-2013/0530	12.0/92.5	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
25-11-2013/1130	12.4/91.3	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1730	12.8/90.6	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
25-11-2013/2330	13.0/89.8	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/0530	13.3/89.1	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.8/87.6	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	14.6/86.1	160-170 GUSTING TO 185	VERY SEVERE CYCLONIC

			STORM
27-11-2013/1730	15.4/84.5	170-180 GUSTING TO 195	/ERY SEVERE CYCLONIC STORM
28-11-2013/0530	16.2/83.0	170-180 GUSTING TO 200	/ERY SEVERE CYCLONIC STORI
28-11-2013/1730	17.2/81.5	140-150 GUSTING TO 165	/ERY SEVERE CYCLONIC STORM
29-11-2013/0530	18.0/80.5	80-90 GUSTING TO 100	CYCLONIC STORM
29-11-2013/1730	19.0/79.5	50-60 GUSTING TO 70	DEEP DEPRESSION

# (xl) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 36 hrs.

#### (xli) Squally/Gale Winds

Gale winds speed reaching 90-100 kmph gusting to 110 kmph would prevail along and off Andaman & Nicobar Islands during next 24 hrs

# (xlii) Storm Surge

Storm surge of about 1 to 1.5 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

# (xliii)Sea condition

Sea condition will be high to very high along and off Andaman & Nicobar Islands during next 24 hrs.

#### Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of large avenue trees. Flooding of escape routes.

#### (xliv)Action Suggested

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.

The next bulletin will be issued at 0530 hrs IST of today, the 25<sup>th</sup> November, 2013.

(Ranjeet Singh) Scientist-E Ph: 011-24631913



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0530 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/10

# Sub: Cyclonic storm 'LEHAR' over Andaman Sea: Cyclone warning for Andaman & Nicobar Islands (Orange Message)

The cyclonic storm **ŁEHAR**' over Andaman Sea moved westward and crossed Andaman and Nicobar island south of Port Blair between 0130-0230 hrs IST and lay centred at 0230 hrs IST of today, the 25th November 2013 near latitude 11.5°N and longitude 92.5°E. The system would intensify further, move west-northwestwards and then emerge into southeast Bay of Bengal, intensify further gradually into a very severe cyclonic storm. It would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)			ategory of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-20130230	12.5/91.0	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
26-11-2013/0830	13.0/89.9	115-125 GUSTING TO 139	SEVERE CYCLONIC STORM
26-11-2013/1430	13.5/88.7	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/2030	14.0/87.6	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0230	14.6/86.2	140-150 GUSTING TO 169	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1430	15.2/84.9	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
28-11-2013/0230	15.8/836	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR

28-11-2013/1430	16.7/824	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
29-11-2013/0230	173/816	115-125 GUSTING TO 13	SEVERE CYCLONIC STORM
30-11-2013/1430	18.1/80.3	70-80 GUSTING TO 90	CYCLONIC STORM

#### (xlv) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 24 hrs.

#### (xlvi)Squally/Gale Winds

Gale winds speed reaching 90-100 kmph gusting to 110 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hrs

### (xlvii) Storm Surge

Storm surge of about 1 to 1.5 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

## (xlviii) Sea condition

Sea condition will be high to very high along and off Andaman & Nicobar Islands during next 12 hrs.

#### Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of large avenue trees. Flooding of escape routes.

## (xlix)Action Suggested

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.

The next bulletin will be issued at 0830 hrs IST of today, the 25<sup>th</sup> November, 2013.

(Ranjeet Singh) Scientist-E Ph: 011-24631913



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0830 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/11

Sub: Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal:
Cyclone Warning for Andaman and Nicobar Islands (Red Message)

The cyclonic storm **ŁEHAR'** over Andaman Sea moved northwestward with a speed of 15 km/hr. during past 6hrs, intensified into a Severe Cyclonic Storm, crossed Andaman and Nicobar Islands, close to Port Blair in the early morning and lay centred at 0530 hrs IST of today, the 25th November 2013 over southeast Bay of Bengal near latitude 12.0°N and longitude 92.5°E, close to Port Blair,1300km east-southeast of Machillipatnam, 1230 km east-southeast of Kakinada and 1140km of Kalingapatnam. The system would intensify further gradually into a very severe cyclonic storm and would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam(43185) and Kalingapatnam (43105) near Kakinada(43189) around 28<sup>th</sup> November noon.

Date/Time(IST)		Maximum sustained surface	Category
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (kmph)	
25-11-2013/0530	12.0/92.5	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1130	12.4/91.8	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1730	12.7/91.0	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
25-11-2013/2330	13.0/89.3	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/0530	13.3/88.6	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC
			STORM

26-11-2013/1730	13.8/87.2	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	14.6/85.6	160-170 GUSTING TO 185	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1730	15.6/84.2	170-180 GUSTING TO 195	/ERY SEVERE CYCLONIC STORM
28-11-2013/0530	16.6/83.0	170-180 GUSTING TO 200	/ERY SEVERE CYCLONIC STORI
28-11-2013/1730	17.6/81.8	140-150 GUSTING TO 165	/ERY SEVERE CYCLONIC STORI
29-11-2013/0530	18.8/80.6	80-90 GUSTING TO 100	CYCLONIC STORM
29-11-2013/1730	19.8/80.0	50-60 GUSTING TO 70	DEEP DEPRESSION

#### (I) Rainfall

Rainfall at most places with heavy to very heavy rainfall at a few places with isolated extremely heavy falls (25 cm or more) would occur over Andaman & Nicobar Islands during 18 hrs.

## (li) Squally/Gale Winds

Gale winds speed reaching 100-110 kmph gusting to 120 kmph would prevail along and off Andaman & Nicobar Islands during next 6 hrs and gradually decrease thereafter.

# (lii) Storm Surge

Storm surge of about 1 to 1.5 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point.

#### (liii) Sea condition

Sea condition will be high to very high along and off Andaman & Nicobar Islands during next 12 hrs.

#### Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of large avenue trees. Flooding of escape routes.

## (liv) Action Suggested

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.

The next bulletin will be issued at 1130 hrs IST of today, the 25<sup>th</sup> November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1130 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/12

Sub: Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal:
Cyclone Warning for Andaman and Nicobar Islands (Red Message)
Cyclone Alert for Andhra Pradesh coast (Yellow Message)

The severe cyclonic storm **±EHAR**' over southeast Bay of Bengal moved west-northwestward with a speed of 15 km/hr during past 6hrs and lay centred at 0830 hrs IST of today, the 25th November 2013 over southeast Bay of Bengal near latitude 12.0°N and longitude 92.0°E about 80 km west-northwest of Port Blair, 1250 km east-southeast of Machillipatnam, 1180 km east-southeast of Kakinada and 1100 km southeast of Kalingapatnam. The system would intensify further gradually into a very severe cyclonic storm and would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)		Maximum sustained surface	Category
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (kmph)	
25-11-2013/0830	12.0/92.0	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1130	12.2/91.5	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1730	12.7/91.0	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
25-11-2013/2330	13.0/89.3	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/0530	13.3/88.6	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC
			STORM

26-11-2013/1730	13.8/87.2	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	14.6/85.6	160-170 GUSTING TO 185	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1730	15.6/84.2	170-180 GUSTING TO 195	ERY SEVERE CYCLONIC STORM
28-11-2013/0530	16.6/83.0	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STORM
28-11-2013/1730	17.6/81.8	140-150 GUSTING TO 165	ERY SEVERE CYCLONIC STORM
29-11-2013/0530	18.8/80.6	80-90 GUSTING TO 100	CYCLONIC STORM
29-11-2013/1730	19.8/80.0	50-60 GUSTING TO 70	DEEP DEPRESSION

#### (lv) Rainfall

Rainfall at most places with isolated heavy to very heavy rainfall would occur over Andaman & Nicobar Islands during next 24 hrs. and intensity would decrease thereafter.

# (Ivi) Squally/Gale Winds

Gale winds speed reaching 80-90 kmph gusting to 100 kmph would prevail along and off Andaman & Nicobar Islands during next 6 hrs and gradually decrease thereafter.

# (Ivii) Storm Surge

Storm surge of about 0.5-1.0 metre height above astronomical tide would inundate the low lying areas of Andaman & Nicobar Islands within 100 km from the landfall point during next six hours and decrease thereafter.

## (Iviii)Sea condition

Sea condition will be high to very high along and off Andaman & Nicobar Islands during next 12 hrs.

### Damage expected due to a cyclonic storm over Andaman & Nicobar Islands

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to breaking of tree branches.

# (lix) Action Suggested

- Total suspension of fishing operations.
- Coastal hutment dwellers to be moved to safer places.
- People in affected areas to remain indoors.

## (B) Warning for coastal Andhra Pradesh and Odisha

#### (i) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28<sup>th</sup> and isolated heavy rainfall over south Odisha.

#### (ii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

#### (iii) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

### (iv) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

# (v) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

#### (vi) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

The next bulletin will be issued at 1430 hrs IST of today, the 25<sup>th</sup> November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1400 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/13

Sub: Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Alert for Andhra Pradesh coast (Yellow Message)

The severe cyclonic storm **ŁEHAR'** over southeast Bay of Bengal moved westwards with a speed of 15 km/hr during past 6hrs and lay centred at 1130 hrs IST of today, the 25th November 2013 over southeast Bay of Bengal near latitude 12.0<sup>0</sup>N and longitude 91.5<sup>0</sup>E about 130 km west-northwest of Port Blair, 1200 km east-southeast of Machillipatnam, 1140 km east-southeast of Kakinada and 1060 km southeast of Kalingapatnam. The system would intensify further gradually into a very severe cyclonic storm and would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)	Position	Maximum sustained surface	Category
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (kmph)	
25-11-2013/1130	12.0/91.5	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1730	12.4/90.8	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
25-11-2013/2330	12.8/90.1	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/0530	13.2/89.3	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1130	13.6/88.6	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC
			STORM

26-11-2013/2330	14.2/87.0	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.8/85.5	160-170 GUSTING TO 185	VERY SEVERE CYCLONIC
			STORM
27-11-2013/2330	15.8/83.8	170-180 GUSTING TO 195	/ERY SEVERE CYCLONIC STORM
28-11-2013/1130	16.6/82.3	170-180 GUSTING TO 200	/ERY SEVERE CYCLONIC STORM
28-11-2013/2330	17.6/81.1	120-130 GUSTING TO 140	/ERY SEVERE CYCLONIC STORM
29-11-2013/1130	18.8/80.0	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/2330	19.8/79.9	50-60 GUSTING TO 70	DEEP DEPRESSION
30-11-2013/1130	21.0/80.0	30-40 GUSTING TO 50	LOW

#### (lx) Rainfall

Rainfall at most places with isolated heavy to very heavy rainfall would occur over Andaman Islands during next 24 hrs and intensity would decrease thereafter.

# (Ixi) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hrs and gradually decrease thereafter.

#### (Ixii) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands during next 12 hrs.

### (Ixiii)Action Suggested

Fishermen are advised not to venture into sea during next 12 hrs.

#### (D) Warning for coastal Andhra Pradesh and Odisha

#### (vii) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28<sup>th</sup> and isolated heavy rainfall over south Odisha.

#### (viii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

#### (ix) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (x) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

# (xi) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

# (xii) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

The next bulletin will be issued at 1730 hrs IST of today, the 25th November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1730 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/14

Sub: Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Alert for Andhra Pradesh coast (Yellow Message)

The severe cyclonic storm **ŁEHAR**' over southeast Bay of Bengal remained practically stationary during past 3 hrs and lay centred at 1430 hrs IST of today, the 25th November 2013 over southeast Bay of Bengal near latitude 12.0°N and longitude 91.5°E about 130 km west-northwest of Port Blair, 1200 km east-southeast of Machillipatnam, 1140 km east-southeast of Kakinada and 1060 km southeast of Kalingapatnam. The system would intensify further gradually into a very severe cyclonic storm and would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)	Position (Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (kmph)	Category
25-11-2013/1430	12.0/91.5	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/1730	12.4/90.8	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC STORM
25-11-2013/2330	12.8/90.1	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC STORM
26-11-2013/0530	13.2/89.3	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC STORM

26-11-2013/1130	13.6/88.6	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC STORM
26-11-2013/2330	14.2/87.0	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC STORM
27-11-2013/1130	14.8/85.5	160-170 GUSTING TO 185	
27-11-2013/2330	15.8/83.8	170-180 GUSTING TO 195	ERY SEVERE CYCLONIC STOR
28-11-2013/1130	16.6/82.3	170-180 GUSTING TO 200	/ERY SEVERE CYCLONIC STORI
28-11-2013/2330	17.6/81.1	120-130 GUSTING TO 140	/ERY SEVERE CYCLONIC STORI
29-11-2013/1130	18.8/80.0	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/2330	19.8/79.9	50-60 GUSTING TO 70	DEEP DEPRESSION
30-11-2013/1130	21.0/80.0	30-40 GUSTING TO 50	LOW

#### (lxiv)Rainfall

Rainfall at most places with isolated heavy to very heavy rainfall would occur over Andaman Islands during next 24 hrs and intensity would decrease thereafter.

### (Ixv) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hrs and gradually decrease thereafter.

# (Ixvi)Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands during next 12 hrs.

#### (Ixvii) Action Suggested

Fishermen are advised not to venture into sea during next 12 hrs.

## (F) Warning for coastal Andhra Pradesh and Odisha

#### (xiii) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28<sup>th</sup> and isolated heavy rainfall over south Odisha.

#### (xiv) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

#### (xv) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

# (xvi) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

## (xvii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (xviii) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

The next bulletin will be issued at 2030 hrs IST of today, the 25th November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 2030 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/15

Sub: Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Alert for Andhra Pradesh coast (Yellow Message)

The severe cyclonic storm **±EHAR'** over southeast Bay of Bengal slightly moved northwestwards during past 6 hrs and lay centred at 1730 hrs IST of today, the 25th November 2013 over southeast Bay of Bengal near latitude 12.5°N and longitude 91.0°E about 200 km west-northwest of Port Blair, 1100 km east-southeast of Machillipatnam, 1050 km east-southeast of Kakinada and 980 km southeast of Kalingapatnam. The system would intensify further gradually into a very severe cyclonic storm and would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28<sup>th</sup> November noon.

Date/Time(IST)		Maximum sustained surface	Category
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)		
25-11-2013/1730	12.5/91.0	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
25-11-2013/2330	12.8/90.3	115-125 GUSTING TO 135	SEVERE CYCLONIC STORM
26-11-2013/0530	13.1/89.6	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1130	13.4/88.8	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.8/88.0	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC

		,	
			STORM
27-11-2013/0530	14.6/86.2	160-170 GUSTING TO 185	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1730	15.4/84.6	170-180 GUSTING TO 200	/ERY SEVERE CYCLONIC STOR
28-11-2013/0530	16.4/83.2	170-180 GUSTING TO 200	/ERY SEVERE CYCLONIC STORI
28-11-2013/1730	17.4/81.8	160-170 GUSTING TO 190	/ERY SEVERE CYCLONIC STORM
29-11-2013/0530	18.4/80.6	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1730	19.4/80.6	50-60 GUSTING TO 70	DEEP DEPRESSION
30-11-2013/0530	20.6/80.8	30-40 GUSTING TO 50	LOW

#### (Ixviii) Rainfall

Rainfall at most places with isolated heavy to very heavy rainfall would occur over Andaman Islands during next 24 hrs and intensity would decrease thereafter.

# (Ixix)Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hrs and gradually decrease thereafter.

#### (Ixx) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands during next 12 hrs.

# (Ixxi)Action Suggested

Fishermen are advised not to venture into sea during next 12 hrs.

#### (H) Warning for coastal Andhra Pradesh and Odisha

#### (xix) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28<sup>th</sup> and isolated heavy rainfall over south Odisha.

#### (xx) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

#### (xxi) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (xxii) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

# (xxiii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

### (xxiv) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

The next bulletin will be issued at 2330 hrs IST of today, the 25<sup>th</sup> November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 2300 hours IST Dated: 25-11-2013

Bulletin No.: BOB07/2013/16

(Yellow Message)

Sub: Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Alert for Andhra Pradesh coast

The severe cyclonic storm **ŁEHAR'** over southeast Bay of Bengal remained practically stationary and lay centred at 2030 hrs IST of today, the 25 November 2013 over southeast Bay of Bengal near latitude 12.5° N and longitude 91.0° E about 200 km west-northwest of Port Blair, 1100 km east-southeast of Machillipatnam, 1050 km east-southeast of Kakinada and 980 km southeast of Kalingapatnam. The system would intensify further into a very severe cyclonic storm and would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)		laximum sustained surfac	Category of the cyclonic
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	disturbances
25-11-2013/2030	12.5/91.0	110-120 GUSTING TO 13	SEVERE CYCLONIC STORM
25-11-2013/2330	12.8/90.5	115-125 GUSTING TO 13	SEVERE CYCLONIC STORM
26-11-2013/0530	13.1/89.6	120-130 GUSTING TO 14	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1130	13.4/88.8	130-140 GUSTING TO 15	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.8/88.0	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM

27-11-2013/0530	14.6/86.2	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1730	15.4/84.6	170-180 GUSTING TO 20	ERY SEVERE CYCLONIC STOR
28-11-2013/0530	16.4/83.2	170-180 GUSTING TO 20	ERY SEVERE CYCLONIC STOR
28-11-2013/1730	17.4/81.8	160-170 GUSTING TO 19	ERY SEVERE CYCLONIC STOR
29-11-2013/0530	18.4/80.6	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1730	19.4/80.6	50-60 GUSTING TO 70	DEEP DEPRESSION
30-11-2013/0530	20.6/80.8	30-40 GUSTING TO 50	LOW

## (Ixxii) Rainfall

Rainfall at most places with isolated heavy to very heavy falls would occur over Andaman Islands during next 24 hrs and intensity of rainfall would decrease thereafter.

### (Ixxiii) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hrs and gradually decrease thereafter.

### (Ixxiv) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands during next 12 hrs.

# (Ixxv) Action Suggested

Fishermen are advised not to venture into sea during next 12 hrs.

## (J) Warning for coastal Andhra Pradesh and Odisha

#### (xxv) Heavy Rainfall:

Moderate rainfall at many places would commence from 27 afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28 and isolated heavy rainfall over south Odisha.

## (xxvi) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27 evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

#### (xxvii) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27 evening and will become phenomenal on 28 November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (xxviii) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

# (xxix) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

# (xxx) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

The next bulletin will be issued at 0230 hrs IST of the 26 November, 2013.

(Charan Singh) Scientist-E Ph: 011-24631913



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0210 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/17

(Yellow Message)

Sub: Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Alert for Andhra Pradesh coast

The severe cyclonic storm **ŁEHAR'** over southeast Bay of Bengal remained practically stationary and lay centred at 2330 hours IST of today, the 25 November 2013 over southeast Bay of Bengal near latitude 12.5° N and longitude 91.0° E, about 200 km west-northwest of Port Blair, 1100 km east-southeast of Machillipatnam, 1050 km east-southeast of Kakinada and 980 km southeast of Kalingapatnam. The system would intensify further into a very severe cyclonic storm and would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)			Category of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
25-11-2013/2330	12.5/91.0	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
26-11-2013/0530	13.0/89.9	115-125 GUSTING TO 13	SEVERE CYCLONIC STORM

26-11-2013/1130	13.5/88.7	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	14.0/87.6	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/2330	14.6/86.2	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	15.3/84.9	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/2330	16.0/83.8	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1130	16.7/82.7	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/2330	17.5/812	115-125 GUSTING TO 13	SEVERE CYCLONIC STORM
29-11-2013/1130	18.9/80.2	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/2330	19.0/80.0	50-60 GUSTING TO 70	DEEP DEPRESSION
30-11-2013/1130	20.2/79.3	40-50 GUSTING TO 60	DEPRESSION

## (K) Warning for Andaman & Nicobar Island

## (lxxvi) Rainfall

Rainfall at most places with isolated heavy to very heavy falls would occur over Andaman Islands during next 24 hrs and intensity of rainfall would decrease thereafter.

## (Ixxvii) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hrs and gradually decrease thereafter.

#### (Ixxviii) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands during next 12 hrs.

## (Ixxix) Action Suggested

Fishermen are advised not to venture into sea during next 12 hrs.

#### (L) Warning for coastal Andhra Pradesh and Odisha

### (xxxi) Heavy Rainfall:

Moderate rainfall at many places would commence from 27 afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28 and isolated heavy rainfall over south Odisha.

### (xxxii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27 evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

## (xxxiii) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27 evening and will become phenomenal on 28 November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

## (xxxiv) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

#### (xxxv) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (xxxvi) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

## The next bulletin will be issued at 0530 hrs IST of the 26 November, 2013.

(Charan Singh) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0530 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/18

(Yellow Message)

# Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Alert for Andhra Pradesh coast

The severe cyclonic storm **ŁEHAR**' over southeast Bay of Bengal remained practically stationary and intensified into a very severe cyclonic storm, lay centred at 0230 hours IST of today, the 26 November 2013 over southeast Bay of Bengal near latitude 12.5° N and longitude 91.0° E, about 200 km west-northwest of Port Blair, 1100 km east-southeast of Machillipatnam, 1050 km east-southeast of Kakinada and 980 km southeast of Kalingapatnam. The system would move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Track and interior	rack and interiorly reredacte of the system are given in the table below.			
Date/Time(IST)	Position	Maximum sustained surfact	Category of cyclonic disturbanc	
	(Lat. ⁰N/ long. ºE	wind speed (kmph)		
26-11-2013/0230	12.5/91.0	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC	
			STORM	
26-11-2013/0830	13.0/89.9	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC	
			STORM	
26-11-2013/1430	13.5/88.7	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC	
			STORM	
26-11-2013/2030	14.0/87.6	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC	

			STORM
27-11-2013/0230	14.6/86.2	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1430	15.2/84.9	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
28-11-2013/0230	15.8/83.6	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1430	16.7/82.4	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
29-11-2013/0230	17.3/81.6	115-125 GUSTING TO 13	SEVERE CYCLONIC STORM
29-11-2013/1430	18.1/80.8	70-80 GUSTING TO 90	CYCLONIC STORM
30-11-2013/0230	18.9/80.0	50-60 GUSTING TO 70	DEEP DEPRESSION
30-11-2013/0830	19.6/80.0	40-50 GUSTING TO 60	DEPRESSION

## (M) Warning for Andaman & Nicobar Island

#### (lxxx) Rainfall

Rainfall at most places with isolated heavy to very heavy falls would occur over Andaman Islands during next 24 hours and intensity of rainfall would decrease thereafter.

## (Ixxxi) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hours and gradually decrease thereafter.

## (Ixxxii) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands during next 12 hrs.

#### (Ixxxiii) Action Suggested

Fishermen are advised not to venture into sea during next 12 hrs.

#### (N) Warning for coastal Andhra Pradesh and Odisha

## (xxxvii) Heavy Rainfall:

Moderate rainfall at many places would commence from 27 afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28 and isolated heavy rainfall over south Odisha.

### (xxxviii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27 evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

## (xxxix) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27 evening and will become phenomenal on 28 November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (xI) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

## (xli) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

#### (xlii) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

## The next bulletin will be issued at 0830 hrs IST of the 26 November, 2013.

(Charan Singh) Scientist-E Ph: 011-24631913



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0830 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/19

(Yellow Message)

Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Alert for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR'** over southeast Bay of Bengal moved slightly westwards and lay centred at 0530 hours IST of today, the 26 November 2013 over southeast Bay of Bengal near latitude 12.5° N and longitude 90.5° E, about 240 km west-northwest of Port Blair, 1100 km east-southeast of Machillipatnam, 1000 km east-southeast of Kakinada and 940 km southeast of Kalingapatnam. The system would intensify, move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)			Category of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-2013/0530	12.5/90.5	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM

26-11-2013/1130	12.6/89.5	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.0/88.8	130-140 GUSTING TO 150	VERY SEVERE CYCLONIC
			STORM
26-11-2013/2330	135/87.9	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	13.9/87.1	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.7/85.3	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/0530	15.5/83.3	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1730	16.4/81.4	115-125 GUSTING TO 13	SEVERE CYCLONIC STORM
29-11-2013/0530	17.3/80.5	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1730	18.4/80.7	50-60 GUSTING TO 70	DEEP DEPRESSION

## (O) Warning for Andaman & Nicobar Island

### (lxxxiv) Rainfall

Rainfall at most places with isolated heavy to very heavy falls would occur over Andaman Islands during next 24 hours and intensity of rainfall would decrease thereafter.

## (Ixxxv) Squally/Gale Winds

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andaman & Nicobar Islands during next 12 hours and gradually decrease thereafter.

## (Ixxxvi) Sea condition

Sea condition will be very rough along and off Andaman & Nicobar Islands during next 12 hrs.

#### (Ixxxvii) Action Suggested

Fishermen are advised not to venture into sea during next 12 hrs.

#### (P) Warning for coastal Andhra Pradesh and Odisha

#### (xliii) Heavy Rainfall:

Moderate rainfall at many places would commence from 27 afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28 and isolated heavy rainfall over south Odisha.

#### (xliv) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27 evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh at the time of landfall.

#### (xlv) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27 evening and will become phenomenal on 28 November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

## (xlvi) Storm Surge Guidance:

Storm surge guidance will be provided from warning stage.

## (xlvii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (xlviii) Action suggested:

Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast.

The next bulletin will be issued at 1130 hrs IST of today the 26 November, 2013.

(Charan Singh) Scientist-E Ph: 011-24631913



#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750/23092398)

CONTROL ROOM NDMA (FAX.NO. 26701729)

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

**SECRETARY, DST (Fax No. 26863847/-2418)** 

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1130 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/20

(Orange Message)

Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR**' over southeast Bay of Bengal moved westwards with a speed of 15 kmph during past six hours and lay centred at 0830 hours IST of today, the 26 November 2013 over southeast Bay of Bengal near latitude 12.5° N and longitude 90.0° E, about 300 km west-northwest of Port Blair, 1030 km east-southeast of Machillipatnam, 970 km east-southeast of Kakinada and 900 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)	Position	Maximum sustained surface	ategory of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-2013/0830	12.5/90.0	125-135 GUSTING TO 14	VERY SEVERE CYCLONIC STORM
26-11-2013/1130	12.6/89.5	135-145 GUSTING TO 15	VERY SEVERE CYCLONIC STORM
26-11-2013/1730	13.0/88.8	140-150 GUSTING TO 169	VERY SEVERE CYCLONIC STORM
26-11-2013/2330	13.5/87.9	150-160 GUSTING TO 175	VERY SEVERE CYCLONIC STORM
27-11-2013/0530	13.9/87.1	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC STORM
27-11-2013/1730	14.7/85.3	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/0530	15.5/83.3	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1730	16.4/81.4	115-125 GUSTING TO 135	SEVERE CYCLONIC STORM
29-11-2013/0530	17.3/80.5	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1730	18.4/80.7	50-60 GUSTING TO 70	DEEP DEPRESSION

## (Q) Warning for coastal Andhra Pradesh and Odisha

## (xlix) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28<sup>th</sup> and isolated heavy rainfall over south Odisha and south coastal Andhra Pradesh.

### (I) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of Krishna, west & east Godavari and Vishakhapatnam districts and 120-130 kmph gusting to 140 kmph over Vizianagar, Srikakulam and Guntur districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh and south Odisha at the time of landfall.

#### (li) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (lii) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Vishakhapatnam and Krishna districts at the time of landfall.

## (liii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (liv) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

The next bulletin will be issued at 1430 hrs IST of today the 26 November, 2013.

(M.MOHAPATRA) Scientist-E Ph: 011-24631913

#### **FAX MESSAGE**

FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1400 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/21

(Orange Message)

Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR**' over southeast Bay of Bengal moved westwards with a speed of 15 kmph during past six hours and lay centred at 1130 hours IST of today, the 26 November 2013 over southeast Bay of Bengal near latitude 12.5° N and longitude 89.5° E, about 360 km west-northwest of Port Blair, 990 km east-southeast of Machillipatnam, 920 km east-southeast of Kakinada and 870 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)	Position	Maximum sustained surfac	Category of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-2013/1130	12.5/89.5	135-145 GUSTING TO 15	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.0/88.8	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
26-11-2013/2330	13.5/87.9	150-160 GUSTING TO 17!	VERY SEVERE CYCLONIC

			STORM
27-11-2013/0530	13.9/87.1	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.3/86.2	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/2330	15.1/84.3	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1130	16.0/82.3		ERY SEVERE CYCLONIC STOR
28-11-2013/2330	16.9/80.9	115-125 GUSTING TO 13	ERY SEVERE CYCLONIC STOR
29-11-2013/1130	17.8/80.6	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/2330	18.9/80.7	40-50 GUSTING TO 70	DEPRESSION

## (R) Warning for coastal Andhra Pradesh and Odisha

### (Iv) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> afternoon over north coastal Andhra Pradesh and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh on 28<sup>th</sup> and isolated heavy rainfall over south Odisha and south coastal Andhra Pradesh.

### (Ivi) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of Krishna, west & east Godavari and Vishakhapatnam districts and 120-130 kmph gusting to 140 kmph over Vizianagar, Srikakulam and Guntur districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh and south Odisha at the time of landfall.

## (Ivii) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (Iviii) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Vishakhapatnam and Krishna districts at the time of landfall.

## (lix) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

#### (lx) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

The next bulletin will be issued at 1730 hrs IST of today the 26 November, 2013.

(M.MOHAPATRA) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 1630 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/22

(Orange Message)

# Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast & adjoining west central Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR**' over southeast Bay of Bengal moved west-northwestwards with a speed of 16 kmph during past six hours and lay centred at 1430 hours IST of today, the 26 November 2013 over southeast & adjoining west central Bay of Bengal near latitude 13.0° N and longitude 89.0° E, about 430 km west-northwest of Port Blair, 920 km east-southeast of Machillipatnam, 850 km east-southeast of Kakinada and 780 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)			Category of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-2013/1430	13.0/89.0	135-145 GUSTING TO 15	VERY SEVERE CYCLONIC
			STORM
26-11-2013/1730	13.2/88.8	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
26-11-2013/2330	13.5/87.9	150-160 GUSTING TO 17	VERY SEVERE CYCLONIC

			STORM
27-11-2013/0530	13.9/87.1	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.3/86.2	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/2330	15.1/84.3	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1130	16.0/82.3	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/2330	16.9/80.9	115-125 GUSTING TO 13	ERY SEVERE CYCLONIC STOR
29-11-2013/1130	17.8/80.6	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/2330	18.9/80.7	40-50 GUSTING TO 70	DEPRESSION

## (S) Warning for coastal Andhra Pradesh and Odisha

## (Ixi) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> afternoon over north coastal Andhra Pradesh; Yanam district of Puducherry and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> and isolated heavy rainfall over south Odisha and south coastal Andhra Pradesh.

## (Ixii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of Krishna, west & east Godavari and Vishakhapatnam districts and Yanam district of Puducherry and 120-130 kmph gusting to 140 kmph over Vizianagaram, Srikakulam and Guntur districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall.

#### (Ixiii) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (Ixiv) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Vishakhapatnam and Krishna districts oa Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

### (Ixv) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

#### (Ixvi) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

The next bulletin will be issued at 2030 hrs IST of today the 26 November, 2013.

(M.MOHAPATRA) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 2000 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/23

(Orange Message)

# Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast & adjoining west central Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR**' over southeast Bay of Bengal moved west-northwestwards with a speed of 20 kmph during past six hours and lay centred at 1730 hours IST of today, the 26 November 2013 over southeast & adjoining central Bay of Bengal near latitude 13.0°N and longitude 88.5°E, about 480 km west-northwest of Port Blair, 860 km east-southeast of Machillipatnam, 800 km east-southeast of Kakinada and 750 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)		Maximum sustained surface	ategory of cyclonic disturband
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-2013/1730	13.0/88.5	135-145 GUSTING TO 15	VERY SEVERE CYCLONIC STORM
26-11-2013/2330	13.3/87.7	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC STORM

27-11-2013/0530	13.6/86.8	150-160 GUSTING TO 17	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.0/85.8	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1730	14.5/84.8	170-180 GUSTING TO 200	VERY SEVERE CYCLONIC
			STORM
28-11-2013/0530	15.5/82.8	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1730	16.5/80.8	150-160 GUSTING TO 17	ERY SEVERE CYCLONIC STOR
29-11-2013/0530	17.7/79.3	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1730	18.9/78.0	40-50 GUSTING TO 70	DEPRESSION

## (T) Warning for coastal Andhra Pradesh and Odisha

## (Ixvii) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> evening over north coastal Andhra Pradesh; Yanam district of Puducherry and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> and isolated heavy rainfall over south Odisha and south coastal Andhra Pradesh.

### (Ixviii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of Krishna, west & east Godavari and Vishakhapatnam districts and Yanam district of Puducherry and 120-130 kmph gusting to 140 kmph over Vizianagaram, Srikakulam and Guntur districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall.

## (Ixix) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

## (Ixx) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Vishakhapatnam and Krishna districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

## (Ixxi) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (Ixxii) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

## The next bulletin will be issued at 2330 hrs IST of today the 26 November, 2013.

(M.MOHAPATRA) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

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CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 2300 hours IST Dated: 26-11-2013

Bulletin No.: BOB07/2013/24

(Orange Message)

## Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast & adjoining west central Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR'** over southeast and adjoining central Bay of Bengal remained practically stationary and lay centred at 2030 hours IST of today, the 26 November 2013 over southeast & adjoining central Bay of Bengal near latitude 13.0° N and longitude 88.5° E, about 480 km west-northwest of Port Blair, 860 km east-southeast of Machillipatnam, 800 km east-southeast of Kakinada and 750 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)			Category of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-2013/2030	13.0/88.5	135-145 GUSTING TO 15	VERY SEVERE CYCLONIC
			STORM
26-11-2013/2330	13.3/87.7	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	13.6/86.8	150-160 GUSTING TO 17:	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.0/85.8	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM

27-11-2013/1730	14.5/84.8	170-180 GUSTING TO 200	VERY SEVERE CYCLONIC
			STORM
28-11-2013/0530	15.5/82.8	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/1730	16.5/80.8	150-160 GUSTING TO 17	ERY SEVERE CYCLONIC STOR
29-11-2013/0530	17.7/79.3	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1730	18.9/78.0	40-50 GUSTING TO 70	DEPRESSION

## (U) Warning for coastal Andhra Pradesh and Odisha

## (Ixxiii) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> evening over north coastal Andhra Pradesh; Yanam district of Puducherry and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> and isolated heavy rainfall over south Odisha and south coastal Andhra Pradesh.

### (Ixxiv) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of Krishna, west & east Godavari and Vishakhapatnam districts and Yanam district of Puducherry and 120-130 kmph gusting to 140 kmph over Vizianagaram, Srikakulam and Guntur districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall.

#### (lxxv) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

#### (Ixxvi) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Vishakhapatnam and Krishna districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

#### (Ixxvii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

### (Ixxviii) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

#### The next bulletin will be issued at 0230 hrs IST of tomorrow the 27 November, 2013.

(T.N.Jha) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

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CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0230 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/25

(Orange Message)

# Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast & adjoining central Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **±EHAR**' over southeast and adjoining central Bay of Bengal moved westward and lay centred at 2330 hours IST of 26 November 2013 over the southeast and adjoining central Bay of Bengal near latitude 13.0° N and longitude 88.0° E, about 510 km west-northwest of Port Blair, 810 km east-southeast of Machillipatnam, 750 km east-southeast of Kakinada and 720 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)			category of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
26-11-2013/2330	13.0/88.0	135-145 GUSTING TO 15	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	13.5/87.0	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.0/86.0	150-160 GUSTING TO 17	VERY SEVERE CYCLONIC
			STORM

27-11-2013/1730	14.5/85.0	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/2330	15.0/83.9	170-180 GUSTING TO 200	VERY SEVERE CYCLONIC
			STORM
28-11-2013/1130	16.0/81.8	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/2330	17.1/80.1	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1130	18.3/78.6	40-50 GUSTING TO 70	DEPRESSION
29-11-2013/2330	19.5/78.2	20-30 GUSTING TO 40	low

## (V) Warning for coastal Andhra Pradesh and Odisha

## (Ixxix) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> evening over north coastal Andhra Pradesh; Yanam district of Puducherry and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> and isolated heavy rainfall over south Odisha and south coastal Andhra Pradesh.

#### (lxxx) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of Krishna, west & east Godavari and Vishakhapatnam districts and Yanam district of Puducherry and 120-130 kmph gusting to 140 kmph over Vizianagaram, Srikakulam and Guntur districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall.

#### (Ixxxi) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

## (Ixxxii) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Vishakhapatnam and Krishna districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

#### (Ixxxiii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (lxxxiv) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

## The next bulletin will be issued at 0530 hrs IST of today the 27 November, 2013.

(T.N.Jha) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0500 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/26

(Orange Message)

## Sub: Very Severe Cyclonic storm 'LEHAR' over Southeast & adjoining central Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR'** over southeast and adjoining central Bay of Bengal moved west-northwestward and lay centred at 0230 hours IST of today, the 27 November 2013 over the southeast and adjoining central Bay of Bengal near latitude 13.2° N and longitude 87.5° E, about 590 km west-northwest of Port Blair, 760 km east-southeast of Machillipatnam, 700 km east-southeast of Kakinada and 670 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast between Machillipatnam and Kalingapatnam near Kakinada around 28 November noon.

Date/Time(IST)			category of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
27-11-2013/0230	13.2/87.5	140-150 GUSTING TO 160	VERY SEVERE CYCLONIC
			STORM
27-11-2013/0530	13.5/87.0	140-150 GUSTING TO 16	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	14.0/86.0	150-160 GUSTING TO 17	VERY SEVERE CYCLONIC
			STORM

27-11-2013/1730	14.5/85.0	160-170 GUSTING TO 18	VERY SEVERE CYCLONIC
			STORM
27-11-2013/2330	15.0/83.9	170-180 GUSTING TO 200	VERY SEVERE CYCLONIC
			STORM
28-11-2013/1130	16.0/81.8	170-180 GUSTING TO 200	ERY SEVERE CYCLONIC STOR
28-11-2013/2330	17.1/80.1	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/1130	18.3/78.6	40-50 GUSTING TO 70	DEPRESSION
29-11-2013/2330	19.5/78.2	20-30 GUSTING TO 40	low

## (W) Warning for coastal Andhra Pradesh and Odisha

## (Ixxxv) Heavy Rainfall:

Moderate rainfall at many places would commence from 27<sup>th</sup> evening over north coastal Andhra Pradesh; Yanam district of Puducherry and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over north coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> and isolated heavy rainfall over south Odisha and south coastal Andhra Pradesh.

## (lxxxvi) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 170-180 kmph gusting to 200 kmph along and off coastal districts of Krishna, west & east Godavari and Vishakhapatnam districts and Yanam district of Puducherry and 120-130 kmph gusting to 140 kmph over Vizianagaram, Srikakulam and Guntur districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall.

#### (Ixxxvii) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off north coastal Andhra Pradesh and adjoining south coastal Andhra Pradesh. It will be rough to very rough along and off south Odisha coast during the above period.

## (Ixxxviii) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Vishakhapatnam and Krishna districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

#### (Ixxxix) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (xc) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

The next bulletin will be issued at 0830 hrs IST of today the 27 November, 2013.

(T.N.Jha) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

Time of issue: 0830 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/27

(Orange Message)

## Sub: Very Severe Cyclonic storm 'LEHAR' over westcentral and adjoining south Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR**' over southeast and adjoining central Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs and lay centred at 0530 hours IST of today, the 27 November 2013 over the westcentral and adjoining south Bay of Bengal near latitude 13.5° N and longitude 87.0° E, about 650 km west-northwest of Port Blair, 700 km east-southeast of Machillipatnam, 640 km east-southeast of Kakinada and 620 km southeast of Kalingapatnam. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast near Machillipatnam around 28 November afternoon.

Date/Time(IST)	Position (Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic disturbance
27-11-2013/0530	13.5/87.0	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1130	13.8/86.0	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1730	14.2/84.8	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM
27-11-2013/2330	14.7/83.8	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM
28-11-2013/0530	15.2/82.6	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC
			STORM
28-11-2013/1730	16.4/80.6	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
29-11-2013/0530	17.6/78.8	50-60 GUSTING TO 70	DEEP DEPRESSION
29-11-2013/1730	18.8/77.0	20-30 GUSTING TO 40	LOW

#### (X) Warning for coastal Andhra Pradesh and Odisha

#### (xci) Heavy Rainfall:

Rainfall at many places would commence from 27<sup>th</sup> evening over coastal Andhra Pradesh; Yanam district of Puducherry and south coastal Odisha. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> November. Isolated heavy to very heavy rainfall would occur over coastal Andhra Pradesh and Telengana on 29<sup>th</sup> November 2013.

#### (xcii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh and south Odisha coasts from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 150-160 kmph gusting to 170 kmph along and off coastal districts of Guntur, Krishna, west & east Godavari and Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry and 100-110 kmph gusting to 120 kmph over Vizianagaram and Prakasham districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall.

#### (xciii) State of sea:

State of Sea along and off Andhra Pradesh and south Odisha coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November along and off coastal Andhra Pradesh.

#### (xciv) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Guntur and Krishna districts of Andhra Pradesh and Yanam district of Puducherry and about 1 metre near Visakhapatnam district at the time of landfall.

#### (xcv) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

## (xcvi) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh and south Odisha coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

#### The next bulletin will be issued at 1130 hrs IST of today the 27 November, 2013.

(T.N.Jha) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1100 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/28

(Orange Message)

## Sub: Very Severe Cyclonic storm 'LEHAR' over westcentral and adjoining south Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm  $\pm$ EHAR' over westcentral and adjoining south Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs and lay centred at 0830 hours IST of today, the 27 November 2013 over the westcentral and adjoining south Bay of Bengal near latitude 13.5° N and longitude 86.5° E, about 650 km east-southeast of Machillipatnam and 600 km east-southeast of Kakinada. The system would intensify further and move west-northwestwards and cross Andhra Pradesh coast near Machillipatnam around 28 November afternoon.

Date/Time(IST)	Position (Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic disturbance
27-11-2013/0830	13.5/86.5	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC STORM
27-11-2013/1130	13.8/86.0	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC STORM
27-11-2013/1730	14.2/84.8	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC STORM
27-11-2013/2330	14.7/83.8	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC STORM
28-11-2013/0530	15.2/82.6	150-160 GUSTING TO 170	VERY SEVERE CYCLONIC STORM
28-11-2013/1730	16.4/80.6	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
29-11-2013/0530	17.6/78.8	50-60 GUSTING TO 70	DEEP DEPRESSION
29-11-2013/1730	18.8/77.0	20-30 GUSTING TO 40	LOW

## (Y) Warning for coastal Andhra Pradesh and Odisha

#### (xcvii) Heavy Rainfall:

Rainfall at many places would commence from 27<sup>th</sup> evening over coastal Andhra Pradesh and Yanam district of Puducherry. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> November and isolated heavy to very heavy rainfall over these regions on 29<sup>th</sup> November 2013. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana on 28<sup>th</sup> and 29<sup>th</sup> Nov 2013. Light to moderate rainfall may occur over south Odisha on 28<sup>th</sup> Nov 2013.

#### (xcviii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 150-160 kmph gusting to 170 kmph along and off coastal districts of Guntur, Krishna, west & east Godavari and Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry and 100-110 kmph gusting to 120 kmph over Vizianagaram and Prakasham districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall. Squally winds speed reaching 40-50 kmph gusting to 60kmph would prevail along and off south coastal Odisha on 28<sup>th</sup> Nov 2013.

#### (xcix) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November.

## (c) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Guntur and Krishna districts of Andhra Pradesh and Yanam district of Puducherry and about 1 metre near Visakhapatnam district at the time of landfall.

#### (ci) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

#### (cii) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

## The next bulletin will be issued at 1430 hrs IST of today the 27 November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

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D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

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CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1430 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/29

(Orange Message)

(MODIFIED)

Sub: Very Severe Cyclonic storm 'LEHAR' over westcentral and adjoining south Bay of Bengal:
Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **±EHAR**' over westcentral and adjoining south Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs and lay centred at 1130 hours IST of today, the 27<sup>th</sup> November 2013 over the westcentral and adjoining south Bay of Bengal near latitude 14.0<sup>0</sup> N and longitude 86.0<sup>0</sup> E, about 570 km east-southeast of Machillipatnam and 510 km southeast of Kakinada. It would move west-northwestwards and cross Andhra Pradesh coast near Machillipatnam around 28<sup>th</sup> November afternoon.

Date/Time(IST)	Position (Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	Maximum sustained surface wind speed (kmph)	Category of cyclonic disturbance
27-11-2013/1130	14.0/86.0	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC STORM
27-11-2013/1730	14.3/85.0	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC STORM
27-11-2013/2330	14.7/83.8	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC STORM
28-11-2013/0530	15.2/82.6	140-150 GUSTING TO 165	VERY SEVERE CYCLONIC STORM
28-11-2013/1730	16.4/80.6	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
29-11-2013/0530	17.6/78.8	50-60 GUSTING TO 70	DEEP DEPRESSION
29-11-2013/1730	18.8/77.0	20-30 GUSTING TO 40	LOW

## (Z) Warning for Andhra Pradesh

#### (ciii) Heavy Rainfall:

Rainfall at many places would commence from 27<sup>th</sup> evening over coastal Andhra Pradesh and Yanam district of Puducherry. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> November and isolated heavy to very heavy rainfall over these regions on 29<sup>th</sup> November 2013. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana on 28<sup>th</sup> and 29<sup>th</sup> Nov 2013. Light to moderate rainfall may occur at a few places over south Odisha on 28<sup>th</sup> Nov 2013.

#### (civ) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 150-160 kmph gusting to 170 kmph along and off coastal districts of Guntur, Krishna, west & east Godavari and Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry and 100-110 kmph gusting to 120 kmph over Prakasham districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 55-65 kmph gusting to 75 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall. Strong winds speed reaching 30-40 kmph gusting to 50kmph would prevail along and off south coastal Odisha on 28<sup>th</sup> Nov 2013.

#### (cv) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough from 27<sup>th</sup> evening and will become phenomenal on 28<sup>th</sup> November.

#### (cvi) Storm Surge Guidance:

Storm surge of height about 2.0-3.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Guntur and Krishna districts of Andhra Pradesh and Yanam district of Puducherry and about 1 metre near Visakhapatnam district at the time of landfall.

#### (cvii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to kutcha houses. Disruption of power and communication line. Disruption of rail and road traffic. Potential threat from flying debris. Flooding of escape routes. Extensive damage to agricultural crops.

#### (cviii) Action suggested:

Total suspension of fishing operations. Fishermen out at sea along and off Andhra Pradesh coasts are advised to return to coast. Mobilise evacuation from coastal areas. Judicious regulation of rail and road traffic. People in affected areas to remain indoors.

The next bulletin will be issued at 1730 hrs IST of today the 27 November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1600 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/30

(Orange Message)

Sub: Very Severe Cyclonic storm 'LEHAR' over westcentral and adjoining south Bay of Bengal:

Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR**' over westcentral and adjoining south Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs and lay centred at 1430 hours IST of today, the 27<sup>th</sup> November 2013 over the westcentral and adjoining south Bay of Bengal near latitude 14.0<sup>0</sup> N and longitude 85.5<sup>0</sup> E, about 520 km east-southeast of Machillipatnam and 470 km southeast of Kakinada. It would move west-northwestwards, weaken gradually and cross Andhra Pradesh coast near Machillipatnam as a cyclonic storm around 28<sup>th</sup> November afternoon.

Date/Time(IST)	Position	Maximum sustained surface	Category of cyclonic disturbance
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (kmph)	
27-11-2013/1430	14.0/85.5	120-130 GUSTING TO 140	VERY SEVERE CYCLONIC
			STORM
27-11-2013/1730	14.5/85.0	110-120 GUSTING TO 130	SEVERE CYCLONIC STORM
27-11-2013/2330	15.0/83.8	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
28-11-2013/0530	15.5/82.6	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
28-11-2013/1130	16.1/81.6	80-90 GUSTING TO 100	CYCLONIC STORM
28-11-2013/2330	17.4/79.6	55-65 GUSTING TO 75	DEEP DEPRESSION
29-11-2013/1130	18.7/77.6	20-30 GUSTING TO 40	LOW

- (AA) Warning for Andhra Pradesh
- (cix) Heavy Rainfall:

Rainfall at many places would commence from 27<sup>th</sup> evening over coastal Andhra Pradesh and Yanam district of Puducherry. Intensity would gradually increase with rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls over coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> November and isolated heavy to very heavy rainfall over these regions on 29<sup>th</sup> November 2013. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana on 28<sup>th</sup> and 29<sup>th</sup> Nov 2013.

#### (cx) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would commence along and off Andhra Pradesh from 27<sup>th</sup> evening. It would increase in intensity with gale wind speed reaching 80-90 kmph gusting to 100 kmph along and off coastal districts of Guntur, Krishna, west & east Godavari and Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry and 60-70 kmph gusting to 80 kmph over Prakasham districts of coastal Andhra Pradesh at the time of landfall. Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off remaining districts of Andhra Pradesh at the time of landfall.

#### (cxi) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough from 27<sup>th</sup> evening and will become very high on 28<sup>th</sup> November.

## (cxii) Storm Surge Guidance:

Storm surge of height about 1.0-2.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, Guntur and Krishna districts of Andhra Pradesh and Yanam district of Puducherry.

## (cxiii) Damage expected over north coastal Andhra Pradesh:

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of trees. Flooding of escape routes. Extensive damage to agricultural crops.

#### (cxiv) Action suggested:

Total suspension of fishing operations. Coastal hutment dwellers to be moved to safer places. People in affected areas to remain indoors.

The next bulletin will be issued at 2030 hrs IST of today the 27 November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1930 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/31

(Orange Message)

Sub: Severe Cyclonic storm 'LEHAR' over westcentral Bay of Bengal : Cyclone Warning for Andhra Pradesh coast

The very severe cyclonic storm **ŁEHAR**' over westcentral and adjoining south Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs, weakened into a Severe Cyclonic Storm and lay centred at 1730 hours IST of today, the 27<sup>th</sup> November 2013 over the westcentral Bay of Bengal near latitude 14.5<sup>0</sup> N and longitude 85.0<sup>0</sup> E, about 450 km east-southeast of Machillipatnam and 400 km southeast of Kakinada. It would move west-northwestwards, weaken further and cross Andhra Pradesh coast near Machillipatnam as a cyclonic storm around 28<sup>th</sup> November afternoon.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)	Position		Category of cyclonic disturbance
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)		
27-11-2013/1730	14.5/85.0	100-110 GUSTING TO 120	SEVERE CYCLONIC STORM
27-11-2013/2330	15.0/83.8	90-100 GUSTING TO 110	SEVERE CYCLONIC STORM
28-11-2013/0530	15.5/82.6	80-90 GUSTING TO 100	CYCLONIC STORM
28-11-2013/1130	16.1/81.6	70-80 GUSTING TO 90	CYCLONIC STORM
28-11-2013/1730	16.6/80.6	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/0530	17.9/78.6	45-50 GUSTING TO 60	DEPRESSION
29-11-2013/1730	19.2/77.0	20-30 GUSTING TO 40	LOW

## (BB) Warning for Andhra Pradesh

#### (cxv) Heavy Rainfall:

Rainfall at most places with heavy to very heavy falls at a few places would occur over coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> November and isolated heavy to

very heavy rainfall over these regions on 29<sup>th</sup> November 2013. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana on 28<sup>th</sup> and 29<sup>th</sup> Nov 2013.

#### (cxvi) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andhra Pradesh during next 24 hours. It would increase in intensity with gale wind speed reaching 70-80 kmph gusting to 90 kmph along and off coastal districts of Guntur, Krishna, west & east Godavari and adjoining areas of Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

#### (cxvii) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough. It will gradually become very high on 28<sup>th</sup> November.

#### (cxviii) Storm Surge Guidance:

Storm surge of height about 1.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, and Krishna districts of Andhra

## (cxix) Damage expected over coastal Andhra Pradesh:

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of trees.. Extensive damage to agricultural crops.

#### (cxx) Action suggested:

Total suspension of fishing operations. Coastal hutment dwellers to be moved to safer places. People in affected areas to remain indoors.

The next bulletin will be issued at 2330 hrs IST of today the 27 November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 2230 hours IST Dated: 27-11-2013

Bulletin No.: BOB07/2013/32

(Orange Message)

Sub: Severe Cyclonic storm 'LEHAR' over westcentral Bay of Bengal : Cyclone Warning for Andhra Pradesh coast

The severe cyclonic storm **±EHAR'** over westcentral Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs and lay centred at 2030 hours IST of today, the 27<sup>th</sup> November 2013 over the westcentral Bay of Bengal near latitude 14.5<sup>0</sup> N and longitude 84.5<sup>0</sup> E, about 400 km east-southeast of Machillipatnam and 360 km southeast of Kakinada. It would move west-northwestwards, weaken further and cross Andhra Pradesh coast near Machillipatnam as a cyclonic storm around 28<sup>th</sup> November afternoon.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)	Position		Category of cyclonic disturbance
	(Lat. ⁰N/ long. ºE)		
27-11-2013/2030	14.5/84.5	100-110 GUSTING TO 120	
27-11-2013/2330	15.0/83.8	80-90 GUSTING TO 100	CYCLONIC STORM
28-11-2013/0530	15.5/82.6	80-90 GUSTING TO 100	CYCLONIC STORM
28-11-2013/1130	16.1/81.6	70-80 GUSTING TO 90	CYCLONIC STORM
28-11-2013/1730	16.6/80.6	70-80 GUSTING TO 90	CYCLONIC STORM
29-11-2013/0530	17.9/78.6	45-50 GUSTING TO 60	DEPRESSION
29-11-2013/1730	19.2/77.0	20-30 GUSTING TO 40	LOW

#### (CC) Warning for Andhra Pradesh

#### (cxxi) Heavy Rainfall:

Rainfall at most places with heavy to very heavy falls at a few places would occur over coastal Andhra Pradesh and Yanam district of Puducherry on 28<sup>th</sup> November and isolated heavy to

very heavy rainfall over these regions on 29<sup>th</sup> November 2013. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana on 28<sup>th</sup> and 29<sup>th</sup> Nov 2013.

#### (cxxii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andhra Pradesh during next 24 hours. It would increase in intensity with gale wind speed reaching 70-80 kmph gusting to 90 kmph along and off coastal districts of Guntur, Krishna, west & east Godavari and adjoining areas of Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

#### (cxxiii) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough. It will gradually become very high on 28<sup>th</sup> November.

#### (cxxiv) Storm Surge Guidance:

Storm surge of height about 1.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, and Krishna districts of Andhra

## (cxxv) Damage expected over coastal Andhra Pradesh:

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of trees.. Extensive damage to agricultural crops.

## (cxxvi) Action suggested:

Total suspension of fishing operations. Coastal hutment dwellers to be moved to safer places. People in affected areas to remain indoors.

The next bulletin will be issued at 0230 hrs IST of tomorrow the 28 November, 2013.

(Naresh Kumar) Scientist-C Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729)

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700) CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRÁ PRADESH (FAX No. 040-23794375)

Time of issue: 0200 hours IST Dated: 28-11-2013

Bulletin No.: BOB07/2013/33

(Orange Message)

Sub: Cyclonic storm 'LEHAR' over westcentral Bay of Bengal: Cyclone Warning for Andhra Pradesh coast

The severe cyclonic storm **ŁEHAR**' over westcentral Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs, weakened into a cyclonic storm and lay centred at 2330 hours IST of yesterday, the 27th November 2013 over the westcentral Bay of Bengal near latitude 15.0 N and longitude 84.0° E, about 330 km east-southeast of Machillipatnam and 280 km southeast of Kakinada. It would move west-northwestwards, weaken further and cross Andhra Pradesh coast near Machillipatnam as a cyclonic storm around 28<sup>th</sup> November afternoon.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)	Position	Maximum sustained surface	Category of cyclonic disturbance
, ,	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (kmph)	
27-11-2013/2330	15.0/84.0	80-90 GUSTING TO 100	CYCLONIC STORM
28-11-2013/0530	15.5/82.6	80-90 GUSTING TO 100	CYCLONIC STORM
28-11-2013/1130	16.1/81.6	70-80 GUSTING TO 90	CYCLONIC STORM
28-11-2013/1730	16.6/80.6	60-70 GUSTING TO 90	CYCLONIC STORM
28-11-2013/2330	17.2/79.6	40-50 GUSTING TO 60	DEPRESSION
29-11-2013/1130	18.5/78.0	20-30 GUSTING TO 40	LOW

## (DD) Warning for Andhra Pradesh

#### (cxxvii) **Heavy Rainfall:**

Rainfall at most places with heavy to very heavy falls at a few places would occur over coastal Andhra Pradesh and Yanam district of Puducherry on today, the 28<sup>th</sup> November and isolated heavy to very heavy rainfall over these regions on 29th November 2013. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana on 28<sup>th</sup> and 29<sup>th</sup> Nov 2013.

## (cxxviii) Gale wind:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andhra Pradesh during next 24 hours. It would increase in intensity with gale wind speed reaching 60-70 kmph gusting to 80 kmph along and off coastal districts of Guntur, Krishna, west & east Godavari and adjoining areas of Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

## (cxxix) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough. It will gradually become very high on 28<sup>th</sup> November.

#### (cxxx) Storm Surge Guidance:

Storm surge of height about 1.0 metres above astronomical tide would inundate low lying areas of west and east Godavari, and Krishna districts of Andhra

## (cxxxi) Damage expected over coastal Andhra Pradesh:

Extensive damage to thatched roofs and huts. Minor damage to power and communication lines due to uprooting of trees.. Extensive damage to agricultural crops.

## (cxxxii) Action suggested:

Total suspension of fishing operations. Coastal hutment dwellers to be moved to safer places. People in affected areas to remain indoors.

The next bulletin will be issued at 0530 hrs IST of today the 28 November, 2013.

(Naresh Kumar) Scientist-C Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 0500 hours IST Dated: 28-11-2013

Bulletin No.: BOB07/2013/34

(Orange Message)

Sub: Cyclonic storm 'LEHAR' over westcentral Bay of Bengal: Warning for Andhra Pradesh coast (Modified)

The cyclonic storm **ŁEHAR'** over westcentral Bay of Bengal moved west-northwestward with a speed of 15 kmph during past six hrs and lay centred at 0230 hours IST of today, the 28<sup>th</sup> November 2013 over the westcentral Bay of Bengal near latitude 15.0° N and longitude 83.5° E, about 280 km east-southeast of Machillipatnam and 250 km south-southeast of Kakinada. It would move west-northwestwards, weaken further and cross Andhra Pradesh coast near Machillipatnam as a deep depression around today, the 28<sup>th</sup> November afternoon.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)			ategory of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
28-11-2013/0230	15.0/83.5	80-90 GUSTING TO 100	CYCLONIC STORM
28-11-2013/0530	15.5/82.6	70-80 GUSTING TO 90	CYCLONIC STORM
28-11-2013/1130	16.1/81.6	65-75 GUSTING TO 85	CYCLONIC STORM
28-11-2013/1730	16.6/80.6	50-60 GUSTING TO 70	DEEP DEPRESSION
28-11-2013/2330	17.2/79.6	40-50 GUSTING TO 60	DEPRESSION
29-11-2013/1130	18.5/78.0	20-30 GUSTING TO 40	LOW

#### (EE) Warning for Andhra Pradesh

## (cxxxiii) Heavy Rainfall:

Rainfall at most places with heavy to very heavy falls at a few places would occur over coastal Andhra Pradesh and Yanam district of Puducherry during next 24 hours and isolated heavy to very heavy rainfall over these regions for subsequent 24 hours. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana during next 48 hours.

## (cxxxiv) Squally winds:

Squally winds speed reaching 40-50 kmph gusting to 60 kmph would prevail along and off Andhra Pradesh during next 12 hours. Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail

along and off coastal districts of Guntur, Krishna, west & east Godavari and adjoining areas of Vishakhapatnam districts of Andhra Pradesh and Yanam district of Puducherry at the time of landfall.

## (cxxxv) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough.

## (cxxxvi) Damage expected over coastal Andhra Pradesh:

Minor damage to loose and unsecured structures.

## (cxxxvii) Action suggested:

Fishermen are advised not to venture in the open seas.

The next bulletin will be issued at 0830 hrs IST of today the 28 November, 2013.

(Naresh Kumar) Scientist-C Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

UNI (FAX NO. 23355841)

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

CHIEF SECRETARY, GOVT. OF ANDAMAN & NICOBAR ISLAND (FAX NO. 03192-223331)

CHIEF SECRETAERY, TAMILNADU (FAX NO.044-25672304)

CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 0800 hours IST Dated: 28-11-2013

Bulletin No.: BOB07/2013/35

# Sub: Cyclonic storm 'LEHAR' over westcentral Bay of Bengal weakened into a deep depression.

The cyclonic storm **ŁEHAR**' over westcentral Bay of Bengal moved west-northwestwards with a speed of 20 kmph during past six hrs and weakened into a deep depression and lay centred at 0530 hours IST of today, the 28<sup>th</sup> November 2013 over the westcentral Bay of Bengal near latitude 15.5° N and longitude 82.0° E, about 120 km east-southeast of Machillipatnam and 160 km south of Kakinada. It would move west-northwestwards, weaken further and cross Andhra Pradesh coast near Machillipatnam as a depression by today, the 28<sup>th</sup> November afternoon.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)			ategory of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
28-11-2013/0530	15.5/82.0	55-65 GUSTING TO 75	DEEP DEPRESSION
28-11-2013/1130	15.9/81.3	45-55 GUSTING TO 65	DEPRESSION
28-11-2013/1730	16.3/80.3	20-30 GUSTING TO 40	LOW

#### (FF) Warning for Andhra Pradesh

## (cxxxviii) Heavy Rainfall:

Rainfall at most places with isolated heavy to very heavy falls would occur over coastal Andhra Pradesh and Yanam district of Puducherry during next 24 hours. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana during next 36 hours.

## (cxxxix) Squally winds:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andhra Pradesh during next 12 hours.

## (cxl) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough.

## (cxli) Damage expected over coastal Andhra Pradesh:

Minor damage to loose and unsecured structures.

## (cxlii) Action suggested:

Fishermen are advised not to venture in the open seas.

The next bulletin will be issued at 1130 hrs IST of today the 28 November, 2013.

(Naresh Kumar) Scientist-C Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

PS TO HON'BLE MINISTER FOR S & T AND ÉARTH SCIENCES (FAX NO.23316745)

SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

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D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

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CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1100 hours IST Dated: 28-11-2013

Bulletin No.: BOB07/2013/36

#### Sub: Deep Depression over westcentral Bay of Bengal.

The deep depression over westcentral Bay of Bengal moved west-northwestwards with a speed of 20 kmph during past six hrs and lay centred at 0830 hours IST of today, the 28<sup>th</sup> November 2013 over the westcentral Bay of Bengal near latitude 15.7<sup>0</sup> N and longitude 81.7<sup>0</sup> E, about 80 km east-southeast of Machillipatnam. It would move west-northwestwards, weaken further and cross Andhra Pradesh coast near Machillipatnam by today, the 28<sup>th</sup> November afternoon.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)	Position		Category of cyclonic disturbance
	(Lat. ⁰N/ long. ºE)	wind speed (kmph)	
28-11-2013/0830	15.7/81.7	55-65 GUSTING TO 75	DEEP DEPRESSION
28-11-2013/1130	15.9/81.3	50-60 GUSTING TO 70	DEEP DEPRESSION
28-11-2013/1730	16.3/80.3	35-45 GUSTING TO 55	DEPRESSION

#### Warning for Andhra Pradesh

#### (cxliii) Heavy Rainfall:

Rainfall at most places with isolated heavy to very heavy falls would occur over coastal Andhra Pradesh and Yanam district of Puducherry during next 24 hours. Rainfall at most places with isolated heavy to very heavy falls would also occur over Telangana during next 36 hours.

#### (cxliv) Squally winds:

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andhra Pradesh during next 12 hours.

## (cxlv) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough.

(cxlvi) Damage expected over coastal Andhra Pradesh:

Minor damage to loose and unsecured structures.

(cxlvii) Action suggested:

Fishermen are advised not to venture into the sea.

The next bulletin will be issued at 1430 hrs IST of today the 28 November, 2013.

(M.Mohapatra)

Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

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**DIRECTOR GENERAL, AIR (25843825)** 

**PIB MoES (FAX NO. 23389042)** 

UNI (FAX NO. 23355841)

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CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1330 hours IST Dated: 28-11-2013

Bulletin No.: BOB07/2013/37

#### Sub: Deep Depression over westcentral Bay of Bengal.

The deep depression over westcentral Bay of Bengal moved west-northwestwards with a speed of 10 kmph during past six hrs and lay centred at 1130 hours IST of today, the 28<sup>th</sup> November 2013 over the westcentral Bay of Bengal near latitude 15.7<sup>0</sup> N and longitude 81.3<sup>0</sup> E, about 60 km southeast of Machillipatnam. It would move west-northwestwards and cross Andhra Pradesh coast near Machillipatnam within a few hours and weaken further.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)			ategory of cyclonic disturbanc
	(Lat. ⁰N/ long. ºE	wind speed (kmph)	
28-11-2013/1130	15.7/81.3	55-65 GUSTING TO 75	DEEP DEPRESSION
28-11-2013/1730	16.0/80.3	50-60 GUSTING TO 70	DEEP DEPRESSION
28-11-2013/2330	16.3/79.3	35-45 GUSTING TO 55	DEPRESSION

#### Warning for Andhra Pradesh

(cxlviii) Heavy Rainfall:

Rainfall at most places with isolated heavy falls would occur over coastal Andhra Pradesh and Yanam district of Puducherry during next 24 hours. Rainfall at many places with isolated heavy falls would also occur over Telangana during next 36 hours.

## (cxlix) Squally winds:

Squally winds speed reaching 50-60 kmph gusting to 70 kmph would prevail along and off Andhra Pradesh during next 12 hours.

#### (cl) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough.

## (cli) Damage expected over coastal Andhra Pradesh:

Minor damage to loose and unsecured structures.

## (clii) Action suggested:

Fishermen are advised not to venture into the sea.

The next bulletin will be issued at 1730 hrs IST of today the 28 November, 2013.

(M.Mohapatra) Scientist-E Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

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SECRETARY, MoES, (Fax No. 24629777) SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

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CHIEF SECRETARY, ODISHA (FAX.NO.0674-2536660)

CHIEF SECRETARY, WEST BENGAL (FAX.NO.033-22144328)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1630 hours IST Dated: 28-11-2013

Bulletin No.: BOB07/2013/38

#### (MODIFIED)

## Sub: Deep Depression over westcentral Bay of Bengal crossed Andhra Pradesh coast.

The deep depression over westcentral Bay of Bengal moved northwestwards, weakened into a depression and crossed Andhra Pradesh coast near latitude 15.9°N and longitude 81.1°E (close to south of Machillipatnam) around 1400 hrs IST of today. It lay centred at 1430 hours IST of today, the 28<sup>th</sup> November 2013 over coastal Andhra Pradesh near latitude 15.9°N and longitude 81.0°E. It would move west-northwestwards and weaken further into a well marked low pressure area during next 12 hours.

Track and intensity forecasts of the system are given in the table below:

Date/Time(IST)	Position		Category of cyclonic disturbance
	(Lat. <sup>0</sup> N/ long. <sup>0</sup> E)	wind speed (kmph)	
28-11-2013/1430	15.9/81.0	45-55 GUSTING TO 65	DEPRESSION
28-11-2013/1730	16.2/80.7	40-50 GUSTING TO 60	DEPRESSION
28-11-2013/2330	16.5/79.6	20-30 GUSTING TO 40	LOW

## Warning for Andhra Pradesh

## (cliii) Heavy Rainfall:

Rainfall at many places with isolated heavy falls would occur over coastal Andhra Pradesh, Telangana and Yanam district of Puducherry during next 24 hours.

#### (cliv) Squally winds:

Squally winds speed reaching 45-55 kmph gusting to 65 kmph would prevail along and off Andhra Pradesh during next 12 hours.

#### (clv) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough.

#### (clvi) Action suggested:

Fishermen are advised not to venture into the sea during next 12 hours.

## The next bulletin will be issued at 2030 hrs IST of today the 28 November, 2013.

(M.Mohapatra) Scientist-E

Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

**CONTROL ROOM NDMA (FAX.NO. 26701729)** 

**CABINET SECRETARIAT (FAX.NO.23793144)** 

PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)

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**SECRETARY, DST (Fax No. 26863847/-2418)** 

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

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CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 1900 hours IST Dated: 28-11-2013

Bulletin No.: BOB07/2013/39

#### Sub: Depression over coastal Andhra Pradesh.

The depression over coastal Andhra Pradesh moved west-northwestwards and lay centred at 1730 hours IST of today, the 28<sup>th</sup> November 2013 over coastal Andhra Pradesh near latitude 16.0<sup>0</sup> N and longitude 80.8<sup>0</sup> E about 50 km southwest of Machillipatnam. It would move west-northwestwards and weaken further into a well marked low pressure area during next 06 hours.

## **Warning for Andhra Pradesh**

#### (clvii) Heavy Rainfall:

Rainfall at many places with isolated heavy falls would occur over coastal Andhra Pradesh and Yanam district of Puducherry during next 12 hours.

## (clviii) Squally winds:

Squally winds speed reaching 40-50 kmph gusting to 60 kmph would prevail along and off Andhra Pradesh coast during next 06 hours and decrease thereafter

#### (clix) State of sea:

State of Sea along and off Andhra Pradesh coast will be rough to very rough during next 6 hours.

#### (clx) Action suggested:

Fishermen are advised not to venture into the sea during next 06 hours.

The next bulletin will be issued at 0230 hrs IST of 29 November, 2013.

(M.Mohapatra) Scientist-E

Ph: 011-24631913



FROM: INDIA METEOROLOGICAL DEPARTMENT (Fax No. 24699216/24623220)

To: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)

CONTROL ROOM NDMA (FAX.NO. 26701729) CABINET SECRETARIAT (FAX.NO.23793144)

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SECRETARY, MoES, (Fax No. 24629777)

SECRETARY, DST (Fax No. 26863847/-2418)

H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)

**DIRECTOR GENERAL, DOORDARSHAN (23385843)** 

**DIRECTOR GENERAL, AIR (25843825)** 

PIB MoES (FAX NO. 23389042)

**UNI (FAX NO. 23355841)** 

D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX No. 26105912)

**DIRECTOR OF PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)** 

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CHIEF SECRETARY, PUDUCHERRY (FAX.NO.0413-2337575)

CHIEF SECRETARY, ANDHRA PRADESH (FAX.NO.040-23453700)

COMMISSIONER CUM SECREATRY, DM, GOVT. OF ANDHRA PRADESH (FAX No. 040-23794375)

Time of issue: 0100 hours IST Dated: 29-11-2013

Bulletin No.: BOB07/2013/40

#### Sub: Depression over coastal Andhra Pradesh weakened into a well marked low pressure area

The depression over coastal Andhra Pradesh weakened further and lay as a well marked low pressure area at 2330 hrs IST of the 28th November 2013 over coastal Andhra Pradesh and adjoining Telengana..

#### (clxi) Heavy Rainfall:

Light to moderate rainfall at many places would occur over coastal Andhra Pradesh, Telengana and Yanam district of Puducherry during next 12 hours.

This is the last bulletin for this system. However, regular bulletin will be continued by Meteorological centre, Hyderabad.

Asstt. Meteorologist

(R. G. Bali) Ph: 011-

24631913