Rescuers ready their gear for rescue and relief operations as a low-pressure area in the North Andaman seas that may intensify into a cyclone heads towards Odisha and West Bengal, on Saturday. - *PTI*

Yaas to hit WB-Odisha coast on Wed evening

Cyclonic storm to hit with wind speed of 120-160 kmph; location of the landfall not yet known; states get ready

AKSHAYA KUMAR SAHOO | DC
BHUBANESWAR, MAY 22

The cyclonic circulation formed over the Bay of Bengal on Saturday developed into low pressure over east-central Bay of Bengal. It will intensify into a depression on Sunday morning and then move towards north and northwestwards. On Monday, it is very likely to develop into a cyclonic storm. Subsequently, the cyclonic storm will move northwestwards and reach Odisha-West Bengal Coast around May 26 evening (Wednesday) as a very severe cyclonic storm, India Meteor-ological Department (IMD) forecasted on Saturday

The very severe cyclonic storm which has been named 'Yaas' will hit the coast with a wind speed of 120-160 kilometre per hour (kmph) gusting up to 185 kmph and heavy downpours, the IMD said.

- **THE STATE** government is in touch with the Coast Guard personnel patrolling in the deep sea to ensure that no fishing boat remained in the sea
- **THE RAILWAYS** has cancelled 74 trains passing through East Coast Railway jurisdiction

According IMD director general Dr Mrutyunjaya Mohapatra, the exact location of the landfall of 'Yaas' was not yet known and the weather agency was examining the course of the cyclone.

"The severe cyclonic storm will pass through Odisha-West Bengal coast on Wednesday morning and we are studying the course of the cyclone to ascertain the exact location where it is most likely to make its landfall," said Dr Mohapatra.

Under the impact of the low-pressure, some parts of coastal Odisha on Saturday experienced light to moderate rainfall. Heavy to very heavy rainfall is likely to occur in most of the places in the state after May Tuesday, the IMD predicted, adding, rainfall intensity is likely to go up further in next few days with intensification of the system.

The fishermen have been advised to remain away from venturing into the deep Central Bay of Bengal between May 23 and May 27 as the sea condition would remain very rough during the period.

Odisha chief minister Naveen Patnaik who reviewed the cyclone preparedness on Saturday directed secretaries of all departments concerned and the collectors coastal districts to remain in readiness to address the situation.

A review meeting chaired by chief secretary Suresh Mohapatra was held on Friday in presence of Special Relief Commissioner P.K. Jena, director general of state police, Shri Abhay, Odisha Fire Services DG and top officers of various departments.

Mr Mohapatra said preparatory measures for the evacuation of affected people, cyclone shelter management and post-cyclone restoration were in full swing.

Five teams of National Disaster Response Force (NDRF) from the third battalion at Mundali in Cuttack which were deputed to Gujarat have been brought back and kept in readiness for deployment.

The Odisha Disaster Rapid Action Force and fire services personnel have also been kept ready for action in the areas likely to be hit by the cyclone.

The Times of India 23-May-2021

Groundwater Role In Capital Tremors?

Study Says Rapid Extraction May Be The Trigger, Cites Reduction After Monsoon Rains

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New Delhi: The alarmingly frequent earthquakes in Delhi-NCR last year may have been the result of rapid groundwater extraction in the region, according to a study. Carried out by researchers from National Institute of Technology, Rourkela, the research simulated groundwater extraction data alongside data on GPS-derived vertical displacement, rainfall and earthquake frequency in the Aravalli-Delhi fold belt and observed a reduction in seismic activity after the monsoon rains.

Bhaskar Kundu of NIT Rourkela, who led the study, told **TOI** that while groundwater extraction was not the only factor for the earthquakes, it did appear to influence seismic activity in the region. "Earthquakes have been found to be largely occurring in the top 25 km of the surface and a relation has been found between the withdrawal of water from aquifers and the subsequent destabilisation of faults underneath the aquifers, as a result of compression and extension," explained Kundu.

In academic idiom, the study puts this as: "The low magnitude but moderate seismicity rate of Delhi region on the stable plate-interiors domains of India exhibits significant variation, both in short-term at the annual seasonal scale and in long-term at the decadal scale. It correlates with the anthropogenic groundwater pumping for extensive irrigation, urban activities, and seasonally controlled hydrological loading cycle of the Indo-Ganga Basin-hosted freshwater aquifers."

V K Gahalaut of National Geophysical Research Institute, one of the researchers, explained, "We found that once the aquifers were recharged, they actually stabilised the plates underneath them but when water was extracted, it led to plate movement and creation of stress. This is what destabilises the tectonic plates underneath." Gahalaut added that there was a connection between the monsoon rains recharging the aquifers and a reduction in earthquake frequency.

To identify human-induced earthquakes, over 700 cases have been documented in the past few decades in a database called 'HiQuake', which Kundu said was strengthened by adding the possibility of groundwater extraction-based seismicity around Delhi.

"Exploiting the Gravity Recovery and Climate Experiment (GRACE) data, surface subsidence rate, hydrological models, coupled hydro-mechanical simulation and poro-mechanical analysis of basement fault, we have reported significant variation in the seismicity modulation in Delhi region both in the short term and the over a decade," said Kundu, adding that while the fault movement is generally tectonically driven, human interferences can also cause slips or modulate seismicity in the crust.

According to Kundu, data showed a steady decline in the groundwater table at 1.9cm per year from 2002 to 2009, though this stabilised later.

The study was co-authored by Deepak K Tiwari, Birendra Jha and Naresh K Vissa of NIT Rourkela and Gahalaut, who informed that the study took nearly three years, with rainfall data of over 20 years considered and that of earthquakes of over 50 years.

"We studied last year's data too when earthquakes began occurring frequently from April onwards. However, when the monsoons came, the earthquakes ceased. Data shows a 20-30% reduction in seismic frequency post-monsoon rains," said Gahalaut.

The Bureau of Indian Standards has classified India into four seismic groups: Zone II (low intensity) to Zone V (very severe). Large parts of NCR, including Delhi and Haryana, fall in Zone IV (severe), making them particularly prone to earthquakes. Delhi in the past has recorded several strong historical earthquakes, including in 1720, 1831, 1956 and 1960.

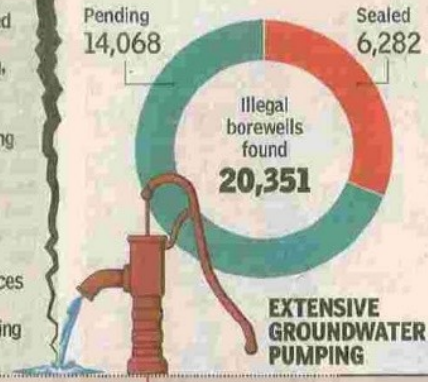
"Interestingly, the seismicity of the Delhi region exhibits strong semi-annual periodicity. Moreover, during the seasonal loading period (June-September, i.e., during the monsoon), the seismicity is lowest, whereas it is relatively high during the unloading period," the study adds.

IN DEEP WATER

STUDY FINDINGS

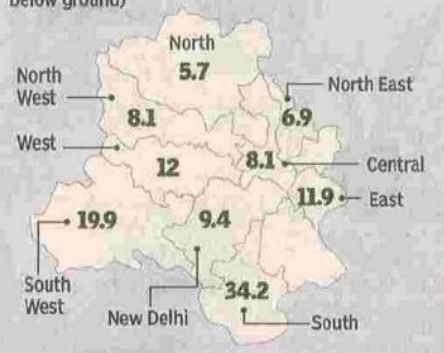
1. Seismicity in the Aravali-Delhi fold belt possibly influenced by non-tectonic groundwater pumping, resulting in fault destabilisation
2. Naturally occurring hydrological unloading from alluvial aquifers also playing a role
3. Earthquake occurrence reduces by 20-30% after precipitation, indicating a stabilising role

ILLEGAL WATER EXTRACTION PROBLEM OF DELHI



6 districts already declared critical as they have been overexploited New Delhi, South, South East, East, North East and Shahdara

AVERAGE WATER DEPTH READINGS (metres below ground)



WATER DRYING UP FAST

- A recent Central Groundwater Board (CGWB) report states Delhi's groundwater table currently declining at a rate of 0.2 metres each year
- In some parts of Delhi, mostly South and South West zones, the groundwater table has fallen to around 80 metres below ground level
- Only the Central zone in Delhi is currently in the 'safe' category, with all the remaining districts either 'critical' or 'overexploited', according to CGWB

The Times of India 23-May-2021

NGT directions to protect Bhalswa lake

New Delhi: Observing that the mandate of law is to maintain waterbodies in their pristine glory as they perform important ecological functions, National Green Tribunal directed the Delhi chief secretary to hold a meeting and take remedial steps to protect Bhalswa lake in northwest Delhi against pollution and encroachment.

A bench headed by NGT chairperson Justice A K Goel ordered the chief secretary to call a meeting of representatives from the Delhi Development Authority, Delhi Jal Board, Delhi Tourism and Transport Development Corporation and North Delhi Municipal Corporation to take cognizance of the problem and plan remedial measures in accordance with law.

The tribunal also asked the Delhi Pollution Control Committee to monitor water quality data of the lake periodically and place the same on its website. PTI

Telangana Today 23-May-2021

Yaas effect: Thunderstorm alert for State

CITY BUREAU
Hyderabad

With Cyclone Yaas intensifying in the Bay of Bengal, the India Meteorological Department (IMD) has issued a two-day thunderstorm warning for Hyderabad and other districts of Telangana. Light showers greeted several parts of the city around late afternoon on Saturday.

The maximum temperature in the city dropped by at least three degrees settling at 36.9 degrees Celsius while the minimum temperature was 25.5 degrees Celsius.

According to the latest developments, weather experts warn that thunderstorms, accompanied by lightning, gusty winds between 30 kmph and 40 kmph and hailstorms, are very likely to occur at isolated places across the State.

Districts, including Hyderabad, Rangareddy, Medchal-Malkajgiri, Adilabad, Mancherial, Nirmal, Jagitial, Peddapalli, Karimnagar, Nizamabad, Kamareddy, Sangareddy, Medak, Vikarabad, Narayanpet and Mahabubnagar will receive moderate to heavy rains for the next couple of days.

Construction workers are silhouetted against the orange sky as they walk along the Tank Bank on Saturday. — Photo: Anand Dharmana

MAY TURN INTO VERY SEVERE CYCLONIC STORM: IMD

NEW DELHI: Cyclone Yaas is likely to intensify into a "very severe cyclonic storm" and cross the Odisha and the West Bengal coasts on May 26, the India Meteorological Department said on Saturday.

A low-pressure area formed over the east-central Bay of Bengal and the adjoining north Andaman Sea on Saturday. "The low-pressure area is very likely to concentrate into a depression over the eastcentral Bay of Bengal by Sunday morning. It is very likely to move north-northwestwards, intensify into a cyclonic storm by May 24 and further into a very severe cyclonic storm during the subsequent 24 hours," it said. PTI

Telangana Today 23-May-2021

NCMC reviews readiness for Yaas

A policeman warns fishermen not to venture into the sea in Puri on Saturday. Navy, NDRF have been put on high alert.— Photo: PTI

NEW DELHI

The National Crisis Management Committee (NCMC) headed by Cabinet Secretary Rajiv Gauba met on Saturday to review preparedness for the impending Cyclone Yaas in the Bay of Bengal, with the top bureaucrat of the country directing various agencies to ensure safety of Covid-19 patients, hospitals and oxygen generation plants.

According to a statement by the Union Home Ministry, the meeting was informed by the IMD that the cyclone is expected to reach West Bengal and adjoining northern Odisha coasts by the evening of May 26 with wind speeds ranging from 155-165 km per hour, accompanied by heavy rainfall and storm surges in the coastal districts. "Reviewing the preparedness of the Central and State agencies, Gauba stressed that the all measures should be taken in a timely manner so that loss of lives and destruction of property is minimised."

"He emphasised on the early evacuation of people from the areas likely to be affected by the cyclone along with ensuring the return of all boats/vessels to the shore, so that there is zero loss of life," the statement said. PTI

Hindustan Times 23-May-2021

{ THE WAY WE WERE }

Poonam Saxena

A century on, the same current flows along the banks

Stark echoes of today ring out in the writings of poet Suryakant Tripathi Nirala, who lost so many loved ones to the influenza pandemic

It was 1918. The great Hindi poet Suryakant Tripathi Nirala, just 22 years old, received a telegram that his wife was seriously ill. She was at her maternal home in Dalmau (in western Uttar Pradesh). By the time Nirala arrived there, Manohara Devi had died. Her lungs were destroyed by a deadly cough.

In a strange twist of fate, some years earlier when Nirala had gone to fetch his bride from her home in a ceremony known as gauna (child brides typically went to their husbands' homes only after puberty), the plague was raging in his village of Gadhakola in Unnao district.

It was the searingly hot month of June. People had abandoned their homes and set up makeshift shelters in orchards. Nirala's father Ramsahay did the same for his son and daughter-in-law; he constructed a hut under a mahua tree. Frightened for his daughter's safety, though, her father rushed there in a few days, to take her back home.

Nirala recounted all this in his memoir, Kulli Bhaat (1938). His wife survived the plague but perished in the terrible 1918 influenza epidemic that was carried to Indian shores by soldiers returning home from World War I.

Still reeling from his wife's death, Nirala left his four-year-old son Ramkrishna and one-year-old daughter Saroj with their naani and returned to Gadhakola. He arrived to find villagers carrying the body of his elder brother Badluprasad to the cremation ground. Dizzy with grief and shock, Nirala sank to the ground. Somehow he managed to get home and discovered that his sister-in-law was ill. So was his uncle. Within days, both died. So did Badluprasad's infant daughter. Nirala buried her near the river.

His whole family was gone. His father had died in 1917; his mother when he was just three. Of his own generation, he was the only one left, with the responsibility of his two children and four orphaned nephews. Recounting this period of unbearable suffering in Nirala's life, literary critic and poet Ram Vilas Sharma writes despairingly in his book Nirala ki Sahitya Sadhana (1969): "Was there any school that could prepare a human being to endure so much anguish?"

His wife's death was the severest blow. They should have had many more years together. He realised too late how much he loved her.

There were so many deaths in Dalmau and its surrounding areas at the time, it was not possible to cremate everyone. Swollen bodies slowly drifted along the banks of the Ganga. After Nirala returned to Dalmau from Gadhakola, he would sit on a mound near the river and watch the corpses float by. At night he would walk about restlessly in the cremation ground. After the death of his wife, his brother, his uncle, his little niece, he no longer flinched at such stomach-churning sights. He had seen life at its most terrifying and desolate.

But there were more sorrows in store for this brilliant poet. In 1935, his daughter Saroj died. When he heard the news, he didn't say a word or shed a single tear. He paced around the room for a while, then picked up his walking stick and left the house. He wrote one of his most moving poems after her death, titled Saroj Smriti.

This was the greatness of Nirala. Despite so much tragedy in his life, and a constant lack of money, he never stopped writing. A pillar of the influential Chhayavad movement of Hindi poetry in the first half of the 20th century, he died in 1961, leaving behind a voluminous, magnificent legacy of poetry collections, novels, short stories, essays and translations (he was fluent in Bengali and translated the works of Tagore and other writers into Hindi).

If he were alive today, maybe he would have once again sat on a mound near the Ganga and watched the corpses as they floated slowly down the river.

The Hans 23-May-2021

Cyclone Yaas likely to become furious

NEW DELHI

CYCLONE Yaas is likely to intensify into a "very severe cyclonic storm" and cross the Odisha and the West Bengal coasts on May 26, the India Meteorological Department (IMD) said on Saturday.

A low-pressure area formed over the east-central Bay of Bengal and the adjoining north Andaman Sea on Saturday. While a low-pressure area is the first stage of formation of a cyclone, it is not necessary that all low-pressure areas will intensify into cyclonic storms. "The low-pressure area is very likely to concentrate into a depression over east central Bay of Bengal by tomorrow, the 23rd May morning. It is very likely to move north-northwestwards, intensify into a Cyclonic Storm by 24th May and further into a very severe cyclonic storm during the subsequent 24 hours," the IMD said. It would continue to move north-northwestwards, intensify further and reach north Bay of Bengal near West Bengal and the adjoining north Odisha and Bangladesh coasts by the morning of May 26, it said.

Continued on Page 5

Cyclone Yaas likely to become furious

Continued from P1

"It is very likely to cross West Bengal and the adjoining north Odisha and Bangladesh coasts around the evening of 26th May," the IMD added.

Last week, extremely severe cyclone Tauktae hit the Gujarat coast and left a trail of destruction all over the western coast. As it weakened further, its impact was felt across the north Indian plains and even in the hill states of Uttarakhand and Himachal Pradesh.

The April-May and the October-December periods are also known to witness cyclones. Last May saw the formation of two cyclones – one in the Bay of Bengal (super cyclonic storm Amphan) and the other in the Arabian Sea (severe cyclonic storm Nisarga) – that hit the Indian coasts.

Rashtriya Sahara 23-May-2021

'यास' भी बन सकता है गंभीर तूफान

■ नई दिल्ली (भाषा)।

आईएमडी ने कहा कि चक्रवात 'यास' के 'वहुत गंभीर चक्रवाती तूफान' में वदलने और 26 मई को ओडिशा तथा पश्चिम वंगाल के तटों को पार करने की आशंका है। शनिवार को पूर्वमध्य वंगाल की खाड़ी और उससे सटे उत्तरी अंडमान सागर के ऊपर एक निम्न दवाव वाला क्षेत्र वना। एक कम दवाव का क्षेत्र चक्रवात के गठन का पहला चरण होता है, यह आवश्यक नहीं है कि सभी निम्न दवाव वाले क्षेत्र चक्रवाती तूफान में तव्दील होते हैं।

आईएमडी ने कहा, 'एक निम्न दवाव के क्षेत्र के कल, 23 मई की सुवह तक वंगाल की खाड़ी के पूर्वमध्य क्षेत्र पर विक्षोभ में केंद्रित होने की आशंका है। इसके उत्तर-उत्तर-पश्चिम की ओर वढ़ने की संभावना है, जो 24

■ मौसम विभाग ने जताई आशंका

मई तक एक चक्रवाती तूफान में तव्दील हो सकता है और अगले 24 घंटों में वहुत गंभीर चक्रवाती तूफान का रूप ले सकता है।'

यह उत्तर-उत्तरपश्चिम की ओर वढ़ता रहेगा और आगे गंभीर रूप लेगा और 26 मई की सुवह तक पश्चिम वंगाल के पास वंगाल की उत्तरी खाड़ी और उससे सटे उत्तरी ओडिशा और वांग्लादेश के तटों तक पहुंच जाएगा। 26 मई की शाम के आसपास इसके प. वंगाल और उत्तरी ओडिशा और वांग्लादेश के तटों को पार करने की वहुत संभावना है।'

बंगाल की खाड़ी में नौसेना ने तैनात किए चार युद्धपोत : चक्रवाती तूफान 'यास' के संभावित खतरे से निपटने के लिए भारतीय नौसेना ने अपने चार युद्धपोतों के अलावा कई विमानों को भी तैनात किया है। गोताखोरों की चार टीमों को ओडिशा और प. वंगाल में भेजा गया है।

तौकते : 26 लोग अब भी लापता

मुंबई (भाषा)। तौकते के छह दिन वाद भी वजरा पी305 के 15 और टगवोट नौका वाराप्रदा के 11 कर्मी लापता हैं। इनका पता लगाने के लिए नौसेना ने शनिवार को मुंवई अपतटीय क्षेत्र में विशेष गोताखोर टीमों को तैनात कर दिया। वजरा पी305 और नौका वाराप्रदा के लापता चालक दल को खोजने के लिए चल रहे खोज एवं वचाव अभियान को वढ़ाने के लिए साइडस्कैन सोनार के साथ आईएनएस मकर और आईएनएस तरासा की मदद ली जा रही है।

Jansatta 23-May-2021

चक्रवात 'यास' संबंधित तैयारियों का लिया जायजा

नई दिल्ली, 22 मई (भाषा)।

कैबिनेट सचिव राजीव गौबा की अध्यक्षता वाली राष्ट्रीय आपदा प्रबंधन समिति (एनसीएमसी) ने शनिवार को एक बैठक में बंगाल की खाड़ी में आने वाले संभावित चक्रवातीय तूफान 'यास' की तैयारियों की समीक्षा की और देश के शीर्ष नौकरशाहों को कोविड-19 मरीजों, अस्पतालों और ऑक्सीजन उत्पादन संयंत्रों की सुरक्षा सुनिश्चित करने का निर्देश दिया।

केंद्रीय गृह मंत्रालय द्वारा जारी बयान के अनुसार, भारत मौसम विज्ञान विभाग ने बैठक में बताया कि चक्रवात के 26 मई की शाम तक पश्चिम बंगाल और पड़ोसी उत्तरी ओड़ीशा के तटवर्ती क्षेत्रों में पहुंचने का अनुमान है और उस दौरान हवा की गति 155 से 165 किलोमीटर प्रतिघंटा रहने, मूसलाधार बारिश होने और तटवर्ती जिलों में तूफान/आंधी चलने का अनुमान है।

बयान के अनुसार, केंद्रीय और राज्य की एजंसियों की तैयारियों की समीक्षा करते हुए गौबा ने इस बात पर जोर दिया कि सभी कदम समय पर उठाए जाएं ताकि जान-माल के नुकसान को न्यूनतम किया जा सके। उसमें कहा गया है कि उन्होंने चक्रवात से प्रभावित होने वाले क्षेत्रों से लोगों को जल्दी सुरक्षित स्थानों पर पहुंचाने, सभी नौकाओं/जहाजों की समय पर तट पर वापसी सुनिश्चित करने पर जोर दिया ताकि क्षति को न्यूनतम किया जा सके। देश में कोविड महामारी के प्रकोप के बीच कैबिनेट सचिव ने स्वास्थ्य केंद्रों की सुरक्षा पर विशेष चर्चा की।

Haribhoomi 23-May-2021

तौकते के बाद मौसम विभाग ने दी एक और चक्रवाती तूफान की चेतावनी

अब 'यास' से तबाही रोकने ओडिशा में हाई अलर्ट जारी

एजेंसी ▶▶ नई दिल्ली

तौकते के बाद अब चक्रवाती तूफान यास देश के पूर्वी तटीय क्षेत्र में दस्तक देने जा रहा है। मौसम विभाग की मानें तो बंगाल की खाड़ी के पूर्वी मध्य हिस्से पर एक कम दबाव का क्षेत्र बन रहा है जो चक्रवाती तूफान में बदल सकता है।

वहीं 26 मई को यास चक्रवात के ओडिशा-पश्चिम बंगाल के तट से गुजरने की आशंका जताने के मद्देनजर ओडिशा सरकार ने 30 में से 14 जिलों को सतर्क कर दिया है।

72 घंटे भारी, 26 को पहुंचेगा बंगाल-ओडिशा

भारत मौसम विज्ञान विभाग ने यास की जानकारी देते हुए कहा था कि 22 मई को उत्तरी अंडमान सागर और आसपास की पूर्व-मध्य बंगाल की खाड़ी में कम दबाव का क्षेत्र बनेगा और अगले 72 घंटों में इसके धीरे-धीरे चक्रवाती तूफान में बदलने की पूरी संभावना है। यह उत्तर पश्चिम दिशा की ओर बढ़ सकता है और 26 मई की शाम के आसपास पश्चिम बंगाल-ओडिशा के तटों तक पहुंच सकता है।

भारतीय तट रक्षक बल आपात स्थिति से निपटने को तैयार

ओडिशा सरकार ने शुक्रवार को भारतीय नौसेना एवं भारतीय तट रक्षक बल से स्थिति से निपटने के लिए तैयार रहने का आग्रह किया है। ओडिशा के मुख्य सचिव एससी मोहपात्रा ने वरिष्ठ अधिकारियों के संग बैठक के बाद कहा कि अगर चक्रवात 'यास' का राज्य पर कोई प्रभाव पड़ता है तो राज्य सरकार ने किसी भी स्थिति से निपटने के लिए कमर कस ली है। हालांकि अबतक मौसम विभाग ने चक्रवात के संभावित, मार्ग, इसकी गति, तट से टकराने का स्थान आदि के बारे में जानकारी नहीं दी है, फिर भी सरकार ने तैयारियां शुरू कर दी हैं।

केंद्र सरकार ने दोनों राज्यों को किया आगाह

इससे पहले केंद्र सरकार ने आंध्र प्रदेश, ओडिशा, तमिलनाडु, पश्चिम बंगाल और अंडमान निकोबार द्वीपसमूह से यह सुनिश्चित करने को कहा है कि स्वास्थ्य केंद्रों पर आवश्यक दवाओं तथा संसाधनों का भंडार रखा जाए ताकि यास तूफान के दौरान किसी भी आपात स्थिति से निपटा जा सके।ओडिशा और पश्चिम बंगाल में तूफान का असर होने के अलावा अंडमान निकोबार द्वीपसमूह तथा पूर्वी तट के जिलों में तेज बारिश हो सकती है और बाढ़ के हालात भी पैदा हो सकते हैं।