

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग
केंद्रीय जल आयोग
जल प्रणाली अभियांत्रिकी निदेशालय



Government of India
Ministry of Jal Shakti
Dept. of Water Resources, RD&GR
Central Water Commission
Water System Engineering Directorate

विषय: समाचार पत्रों की कटिंग का प्रस्तुतीकरण-04-जून-2020

जल संसाधन विकास एवं सम्बद्ध विषयों से संबन्धित समाचार पत्रों की कटिंग को केंद्रीय जल आयोग के अध्यक्ष के अवलोकन के लिए संलग्न किया गया है। इसकी साफ्ट कापी केंद्रीय जल आयोग की वेबसाइट पर भी अपलोड की जाएगी।

संलग्नक: उपरोक्त

(-/sd)

सहायक निदेशक

उप निदेशक -(-s/d)

निदेशक (-s/d)

सेवा में

अध्यक्ष, केंद्रीय जल आयोग, नई दिल्ली

जानकारी हेतु: सभी संबन्धित केंद्रीय जल आयोग की वेबसाइट <http://cwc.gov.in/news-clipping> पर देखें



Deccan Chronical
04-06-2020

AP, TS STATE OFFICIALS TODAY

VUJJINI
VAMSHIDHARA | DC
VIJAYAWADA, JUNE 3

Andhra Pradesh will ask the Krishna River Management Board (KRMB) to evolve a mechanism wherein the board ensures that its orders are strictly adhered to by Telangana on issues varying from release of water on time to construction of new projects. The KRMB will meet on Thursday at Hyderabad amid the ongoing river water disputes between the two neighbouring States.

The newly appointed KRMB chairman A. Paramesham has convened a meeting to be attended by Adityanath Das, special chief secretary, irrigation, Andhra Pradesh, and Rajat Kumar, principal secretary, irrigation, Telangana, besides senior irrigation officials of both states.

With the KRMB acting more like a "post office" and merely communicating each state's viewpoint to the other, not much is expected out of Thursday meeting, say experts in irrigation.

The KRMB had conveyed Telangana's objections to AP on the proposed Rayalaseema Lift Irrigation Scheme and sought Telangana's view on AP's objections to various projects including Palamuru Ranga Reddy.

Not very enthusiastic about an outcome at the meeting, a senior irrigation official pointed out that the Ministry of Jal Shakti or river management boards should ensure that both states follow their directives. "The ministry has already directed KRMB to shift its office to Vijayawada. It's a small issue; yet the directive has remained unimplemented," said the official.

On submitting Detailed Project Reports of RLIS, the Andhra Pradesh government's view is how the board would guarantee that even TS government also submits DPRs of various projects that the KRMB has already asked for. There has to be a time-frame within which both states should be made to follow the directions, the official pointed out.

The Godavari River Management Board (GRMB) is also scheduled to meet on Friday for discussing contentious issues on Godavari. Sources said AP has been asked to submit DPRs of Pattiseema and Purushottapatnam Lift Irrigation Schemes and the same have been submitted by the latter.

● **WITH THE KRMB** acting more like a "post office" and merely communicating each state's viewpoint to the other, not much is expected out of meeting, say experts in irrigation.

Hindustan Times
04-06-2020

Cyclone makes landfall; a lucky escape for Mumbai

NISARGA STRIKES Severe cyclonic storm lashes coast at 120kmph, snaps power lines, fells trees

Badri Das Chatterjee and
Jayashree Nandi
■ letters@hindustantimes.com

MUMBAI/NEW DELHI: Nisarga, the first severe cyclone to impact Mumbai in more than 60 years, largely spared India's financial capital on Wednesday as the severe cyclonic storm weakened after its landfall south of the city, claiming no major damages or loss of life in the region.

The cyclone crossed the coast near Alibag in Raigad district with wind speeds of up to 120km per hour at 12.30pm, the India Meteorological Department (IMD) said. Experts said Mumbai remained largely unaffected as the landfall, initially expected to be 16km away in Alibag, deviated 75km from the coastal resort town.

Four people died as the storm uprooted trees in neighbouring districts, but no major damages were reported as workers began clearing debris on Wednesday night. The deep depression that formed over the Arabian Sea earlier this week turned into a severe cyclonic storm and reached the coastline of Maharashtra on Wednesday.

"It made landfall south of Alibag. The cyclone's eye diameter was 80km and the eye crossed south of Alibag in Raigad but rest of it crossed neighbouring districts," said IMD director general M. Mohapatra. He added that while the forecast on the cyclone



■ Workers clear uprooted trees after rain and strong winds lashed Mumbai.

Rising frequency of cyclones linked to climate change, field experts warn

Jayashree Nandi
■ letters@hindustantimes.com

NEW DELHI: The severe cyclonic storm which made landfall in Maharashtra on Wednesday is an indication of an increasing frequency of severe cyclones developing in Arabian Sea in the past decade, a trend that studies have linked to climate change.

In the past two years itself, there have been seven cyclones formed in the Arabian Sea, though, according to IMD, the ratio of cyclones in the Arabian Sea and the Bay of Bengal — which just witnessed the destructive cyclone Amphan on May 21 — is 1:4. The Intergovernmental Panel on Climate Change (IPCC) last year came out with a special report in which it said that extreme rainfall and extreme sea level events associated with some tropical cyclones are being seen to have a cascading impact on coastal areas. "There is emerging evidence for an increase in annual global proportion of Category 4 or 5 tropical cyclones in recent decades," it said. **■P8**

track was accurate, the effect on Mumbai was diminished as the landfall happened at least 75km south of Alibag, in Diveagar.

IMD's prediction of extremely heavy rainfall was not reported in several areas of Mumbai. The city, however, recorded a gale wind speed of 72kmph at its southern tip, Colaba, quelling fear that the administrative and health care resources, already stretched on account of its coro-

navirus disease (Covid-19) case-load, would not be able to cope with a natural disaster.

Private forecaster Skymet Weather said it was a close shave for the city, which has so far recorded about 48,000 Covid-19 cases and is making attempts at keeping its health care system from being overrun. "Our observation is that the impact on Mumbai was less because the landfall location was shifted somewhat

south of Alibag. There was only light to moderate rains in Mumbai during and immediately after landfall," said Mahesh Palawat, vice president, climate and meteorology at Skymet Weather.

Visuals of lacerating rain, swaying trees and waves crashing against tetrapod barriers that line the Konkan coast beamed on television screens as people

CONTINUED ON P14
FULL COVERAGE ►P8

PTI

Dainik Jagran
04-06-2020

महाराष्ट्र पहुंचते ही कमजोर पड़ा निसर्ग

नई दिल्ली, जेएनएन

अरब सागर से उठा चक्रवात निसर्ग बुधवार दोपहर बाद मुंबई के निकट अलीबाग में जमीन से टकराने के बाद कमजोर पड़ गया। इस तूफान के असर से महाराष्ट्र, गुजरात, केंद्र शासित दमन और दीव और दादर नगर हवेली के तटवर्ती इलाकों में तेज हवाओं और बारिश से जनजीवन प्रभावित रहा। सैकड़ों स्थानों पर पेड़ और बिजली के खंभे गिर गए। चपेट में आकर दर्जनों वाहन क्षतिग्रस्त हो गए। इस दौरान कम से कम तीन लोगों के मरने और कई लोगों के घायल होने की जानकारी मिली है।

इस दौरान मुंबई एयरपोर्ट से कुछ घंटे तक उड़ानें रोक दी गईं। लेकिन मौसम सामान्य होने के बाद शाम छह बजे से विमानों का परिचालन शुरू कर दिया गया। हालांकि, मुंबई विमानतल पर दोपहर बेंगलुरु से आया एक मालवाहक विमान रनवे पर फिसल गया। लेकिन कोई बड़ा हादसा नहीं हुआ। प्रशासन की तरफ से मुंबई सहित महाराष्ट्र के सभी तटवर्ती जिलों में सुरक्षा के लिए एनडीआरएफ ने मोर्चा संभाल रखा था। मुंबई के सभी छह बीचों पर लाइफ गार्ड भी तैनात किए गए थे।

भारतीय मौसम विज्ञान विभाग (आइएमडी) ने बताया कि चक्रवात निसर्ग जब दोपहर बाद 12.30 बजे अलीबाग में जमीन से टकराया तो हवा की रफ्तार 120 किमी प्रति घंटा थी। 2.30 बजे तक हवाएं इसी रफ्तार से चलती रहीं। इस दौरान बारिश भी होती रही। आइएमडी के महानिदेशक मृत्युंजय महापात्र ने बताया कि निसर्ग की रफ्तार शाम चार बजे तक 90 से 100 किमी व शाम 6.30 तक 65 से 75 किमी प्रति घंटे तक रह गई थी। देर रात तक इसके स्वरूप में और परिवर्तन की उम्मीद जताई जा रही थी।

हमारे मुंबई ब्यूरो के अनुसार महाराष्ट्र की धरती को छूते ही चक्रवात निसर्ग कमजोर पड़ गया। मुंबई सहित

प्राकृतिक आपदा

- जमीन से टकराने समय हवा की रफ्तार 120 किमी प्रति घंटे रही
- रायगढ़ में एक और पुणे में दो लोगों की जान गई, कई घायल हुए
- मुंबई, पुणे और ठाणे में कई जगह पेड़ और बिजली के खंभे धराशायी
- समय बीतने के साथ तूफान के असर में देखी गई कमी
- गुजरात में 64 हजार लोगों को सुरक्षित स्थानों पर पहुंचाया गया



मुंबई में चक्रवात निसर्ग के चलते तेज हवाओं और बारिश के दौरान हवाई अड्डे पर लैंडिंग के दौरान एक मालवाहक विमान रनवे से फिसल गया। हालांकि कोई बड़ा हादसा नहीं हुआ।



मुंबई में बुधवार को चक्रवात के चलते नरीमन प्वाइंट स्थित मितल टावर पर गिरा पेड़।

मिड-डे

सभी तटवर्ती जिलों में कुछ नुकसान जरूर हुआ। करीब 40 हजार लोगों को समय से सुरक्षित स्थानों पर भेजे जाने से जान-माल का नुकसान कम हुआ। रायगढ़ में तेज हवा से गिरे एक ट्रांसफार्मर की चपेट में आने से एक व्यक्ति की मृत्यु हो गई है। इसी तरह पुणे में विभिन्न स्थानों पर हुई घटनाओं में दो लोगों की मौत हो गई और तीन अन्य घायल हुए हैं। निसर्ग के बुधवार दोपहर तक महाराष्ट्र के तटवर्ती रायगढ़ जिले से टकराने की संभावना थी। आशंका जताई जा रही थी कि मुंबई से करीब

70 किलोमीटर दूर अलीबाग से टकराने के बाद यह मुंबई, पालघर होते हुए गुजरात के वलसाड़ एवं सूरत की ओर निकल जाएगा। लेकिन यह बुधवार को करीब 12.30 बजे अलीबाग पहुंचा। उस समय हवा की रफ्तार 120 किलोमीटर प्रति घंटा के लगभग थी। इस तूफान का असर गोवा की ओर महाराष्ट्र के रत्नागिरि एवं सिंधुदुर्ग जिलों तथा मुंबई की ओर पालघर तक पड़ा। तेज हवा के साथ मध्यम बरसात हुई।

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पुणे-नासिक की ओर मुड़ा तूफान पेज >>7

Jansatta
04-06-2020

महाराष्ट्र के तट से टकराकर कमजोर पड़ा निसर्ग



तूफान

निसर्ग के दौरान बुधवार को महाराष्ट्र के रत्नागिरी के नर्मदा सीमेंट पोर्ट पर खड़े एक जलाघोत से टकराती लहरे।

अरब सागर में कम दबाव से गोवा में तेज हवाएं व बारिश

पणजी, 3 जून (भाषा)।

अरब सागर में कम दबाव का क्षेत्र बनने से गोवा में बुधवार सुबह भारी बारिश होने के साथ ही तेज हवाएं भी चली। इससे इस तटीय राज्य के कुछ निचले इलाकों बाढ़ की स्थिति उत्पन्न हो गई। भारतीय मौसम विज्ञान विभाग (आइएमडी) ने समुद्र में तेज लहरों के कारण मछुआरों को समुद्र से दूर रहने को कहा है। गोवा सरकार द्वारा नियुक्त जीवन रक्षा एजेंसी 'दृष्टि' ने लोगों से समुद्र में नहीं जाने की अपील की है और 105 किलोमीटर लंबी राज्य तटीय रेखा के पास अधिकांश स्थानों पर लाल झंडे लगाए हैं।

Delhi team to survey Amphan damage

PRANESH SARKAR

Calcutta: A team of central government officials will reach Bengal on Thursday to assess the damage caused by Cyclone Amphan, sources at Nabanna said.

According to the primary itinerary, the team would visit the worst-affected blocks in North 24 Parganas and South 24 Parganas.

"The team is supposed to visit Patharpratima and Namkhana — two worst-affected blocks in South 24 Parganas. The officials would also visit Hingalganj and Basirhat in North 24 Parganas. The team does not have a plan to go to East Midnapore, another cyclone-affected district, so far," an official at Nabanna said.

Sources said the state government had arranged for a helicopter for the officials so that they could cover maximum areas within a short period.

The team would first reach Patharpratima from Calcutta airport and hold a meeting with district officials. Later, the visitors would go to Basirhat where another meeting is scheduled with the North 24 Parganas district authorities.



Trees uprooted in Cyclone Amphan

Chief minister Mamata Banerjee said on Wednesday that if the visit of the central officials was delayed, they might not get a clear picture of the devastation caused by the cyclone as the state government had already undertaken restoration work at many places.

"But we are keeping our report ready to show what damage the cyclone caused to the state," Mamata said at Nabanna on Wednesday.

A state bureaucrat said an inspection team could get a proper picture of the damage only when water receded from affected areas. "So, timing of the central team's visit could be perfect as water has started receding in affected blocks."

"Now, the team can see

clearly what the cyclone has done to houses, roads and other infrastructure and agricultural fields," he added.

The sources said after visiting the affected areas on Thursday, the team was likely to hold a meeting with top officials of the Bengal government on Friday when the state could share its damage assessment report.

The visit is considered to be important for the state government as the Centre can allot financial assistance to Bengal based on the team's report.

So far, the state has been allotted Rs 1,000 crore as an advance under the National Disaster Management Fund to undertake immediate relief and restoration work.

The sources said the state government expected a handsome amount of grant from the Centre considering the extent of the damage.

"Prime Minister himself has taken note of the damage. We expect that this time, the damage would be assessed properly," said an official.

Mamata said during several meetings that the cyclone had caused a damage of Rs 1 lakh crore to the state.

Millennium Post
04-06-2020

Assam flood: Death toll rises to 10

GUWAHATI: The flood situation in Assam improved marginally on Wednesday but one more person died, taking the death toll in the deluge to 10, officials said.

According to the daily flood report of the Assam State Disaster Management Authority (ASDMA), one person died at Lakhipur in Goalpara district and nearly 1.45 lakh people were still affected by the deluge in four districts - Goalpara, Nagaon, Hojai and Cachar.

Goalpara district is the worst hit with 1.16 lakh people suffering, followed by Hojai with over 22,500 people and Nagaon with nearly 5,650 persons.

Till Tuesday, around 1.56 lakh people were affected in the three districts.

The SDRF has rescued six



persons in the last 24 hours in Goalpara, ASDMA said.

At present, 212 villages are under water and 22,718 hectares of crop areas have been damaged, ASDMA said.

It further said authorities are running 21 relief camps and distribution centres in three districts, where 2,913 people are taking shelter currently.

Roads and many other infrastructures have been damaged at various places in Nagaon, Karimganj and Chirang districts.

AGENCIES

LEGAL NOTES

HC orders govt to compensate Kaleshwaram oustees in 3 months

- The exercise of re-determination of compensation for lands, structures and determination of the lump sum rehabilitation and resettlement to each of the oustees of Kaleshwaram Project's Ananthagiri Sagar Reservoir shall be made within 3 months, orders HC
- The petitioners contended that petitioners were forcibly evicted from their lands and houses.

LEGAL CORRESPONDENT

Hyderabad: The High Court has directed the State government that the exercise of re-determination of compensation for lands, structures and determination of the lump sum rehabilitation and resettlement to each of the petitioners and as well as payment of the same shall be made within 3 months.

The Division Bench comprising Justice MS Ramachandra Rao and Justice K.Lakshman was hearing the three writ petitions through video conference on Wednesday.

The petitioners sought compensation for those who lost their lands to Kaleshwaram Project, Ananthagiri Sagar Reservoir in Allipur village, Chinna Kondur mandal, Sid-

dipet district and Ananthagiri village, Ellanthakunta mandal, Rajanna Sircilla District. They said that the oustees were eking out their livelihood by doing farming.

The counsel for the petitioners Rachana Reddy requested the High Court Bench to pay compensation, resettlement and compensation for the land lost to the Kaleshwaram Project's Ananthagiri Sagar Reservoir.

The petitioners contended that petitioners were forcibly evicted from their lands and houses.

Further, the government officials resorted to coercive tactics and forced them to sign 'consent awards' offering arbitrary price for their lands which had no bearing to the registration or the market

HC issues notices to HMR, govts on Metro fare

Hyderabad: Hearing a public interest litigation on Metro Rail fare, the High Court issued notices to Centre, Telangana government and concessioner HMR on Wednesday.

The PIL was filed by CPM Greater Hyderabad secretary M Srinivas Reddy that the Hyderabad Metro Rail charges are contrary to the contract. The petitioner alleged that contrary to the concession agreement for the Hyderabad Metro Rail project, the basic fare declared by it is unfair, unconstitutional. It urged the court to fix the fair of Metro Rail in accordance with Schedule Fare Notification under article/clause 27 1 r/w sub-clause 4 basic fares and pass. The High Court Bench issued notices to the Central and State governments, HRL and L&T to file a counter-petition in four weeks that the Hyderabad Metro Rail charges are contrary to the contract.

The next hearing has been posted to July 1.

value of the lands in the said villages. And that they did not give the willingness to sell their land voluntarily as per the procedure prescribed, the petitioner counsel argued.

Advocate General Banda Shivananda Prasad informed the Bench that the petitioners in all these cases were paid lump sum Rehabilitation and

Resettlement amounts in addition to market value compensation for their lands.

The Bench directed the State government to compensate, rehabilitate and resettle as per the 2013 Act. Moreover, the court ordered the State government to resolve the problems of land-dwellers within three months.

Millennium Post
04-06-2020

शिमला में भारी ओलावृष्टि, दिसम्बर जैसी ठंड

■ 5 व 6 जून को भारी ओलावृष्टि का ऑरेंज अलर्ट जारी

शिमला, 3 जून (ब्यूरो): राजधानी शिमला में बुधवार को मौसम ने एकाएक करवट बदली और शहर में जमकर ओलावृष्टि हुई, जिसके चलते आम जनजीवन खासा प्रभावित हुआ है। अंधड़ के साथ बारिश-ओलावृष्टि से दिन के तापमान में आई गिरावट से ठंडक बढ़ गई।

यहां दोपहर के समय बादलों की गड़गड़ाहट के साथ ओलावृष्टि का दौर शुरू हुआ। लगभग आधे घंटे तक ओलों की बरसात हुई। इससे यातायात भी बाधित हुआ और शहर की रफ्तार थम गई। हालांकि बाद में मौसम सामान्य हो गया।

शिमला में बारिश व ओलावृष्टि होने से

दिसम्बर की तरह ठंड महसूस की जा रही है। यहां आज अधिकतम तापमान 22.6 डिग्री सेंल्सियस दर्ज किया गया। पश्चिमी विक्षोभ के कारण राज्य के अनेक हिस्सों में पिछले कुछ दिनों से जमकर बादल बरस रहे हैं। बाद दोपहर हमीरपुर, बिलासपुर, कांगड़ा और मंडी जिलों के कुछ क्षेत्रों में गरज के साथ बादल बरसे। इससे मौसम सुहावना बना हुआ है

और लोगों को भीषण गर्मी से निजात मिल रही है। मौसम विभाग ने राज्य के अनेक क्षेत्रों में अगले 3 दिन तूफान के साथ भारी ओलावृष्टि की चेतावनी जारी की है।

10 जिलों हमीरपुर, बिलासपुर, सोलन, शिमला, कांगड़ा, चम्बा, कुल्लू, उना, मंडी और सिरमौर में 5 व 6 जून को भारी ओलावृष्टि का ऑरेंज अलर्ट जारी किया गया है।



शिमला: राजधानी में हुई भारी ओलावृष्टि के दौरान रिज पर बिछी सफेद चादर।

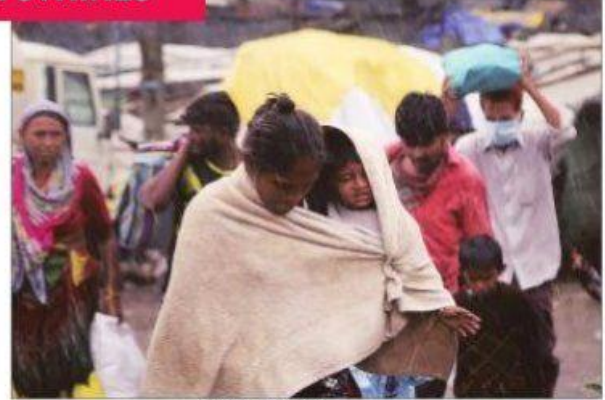
(गरेश)

Financial Express
04-06-2020

SRINATH RAO

NISARGA STRIKES

NIRMAL HARINDRAN



NIRMAL HARINDRAN



Cyclone Nisarga made landfall south of the beach town of Alibag near Mumbai on Wednesday afternoon, leaving uprooted trees and damaged power lines in its wake. Murud and Shrivardhan talukas in Raigad district were the worst-hit

CYCLONE HITS MAHA COAST

Trees, power poles uprooted in Raigad district

SANJANA BHALERAO
Mumbai, June 3

NISARGA, THE SEVERE cyclonic storm, which made landfall in Maharashtra's Raigad district around 12.30 pm on Wednesday, weakened into a 'cyclonic storm' by Wednesday evening, but not before uprooting trees and electricity poles and disrupting electricity supplies in two talukas, Murud and Shrivardhan.

On Wednesday evening,

Maharashtra revenue minister Balasaheb Thorat tweeted saying the district administration in Pune, Nashik and Ahmednagar had been put on alert. The IMD said the 'severe cyclonic storm', with wind speeds of 100-110 kmph, moved north-north-eastwards with a speed of 24 kmph and weakened into a cyclonic storm by 5.30 pm.

Raigad guardian minister and MoS for tourism Aditi Tatkare said the assessment of damage was still on but it was

hampered by heavy rains and strong winds that were still on in parts of Raigad on Wednesday evening. She said the damage caused by the storm was not limited to Murud and Shrivardhan talukas but was felt in other areas of Raigad as well, even those about 50 km away from the coast. No injury was reported until Wednesday evening. About 15,000 people had been evacuated from their homes near the sea in Raigad on Tuesday and were asked to either move in

with relatives or provided shelter at Zilla Parishad schools, Tatkare said.

In Mumbai, over 40,000 people living near the coast were shifted to safer places.

The Brihanmumbai Municipal Corporation (BMC) issued a statement saying 10,840 people had been shifted from areas near the sea coast and other landslide prone locations to 35 municipal schools.

Continued on Page 2

Deccan Chronical
04-06-2020

Cyclone Nisarga kills 4 in Maha, over 75,000 moved to safety

DC CORRESPONDENT
MUMBAI, JUNE 3

Mumbai and its surrounding areas heaved a huge sigh of relief as the cyclonic storm 'Nisarga' passed through without causing much damage on Wednesday. Though coastal parts of the state were lashed by heavy rains and gusty winds, Maharashtra remained largely unscathed with no major untoward incident reported. However, four people died in four cyclone-related incidents in Pune, Raigad and Palghar district.

Two men died after an

electric pole and a tree fell on them in Alibaug district while two others died in Pune after a wall of their house collapsed.

Cyclone Nisarga made landfall at the coastal town of Alibaug in Raigad district, about 100 kms from south of Mumbai, at around 1 pm with wind speeds of up to 120 kmph.

It later moved up and hit the coastal districts of Mumbai, Thane, Raigad and Palghar with winds of up to 100 kmph to 110 kmph. Heavy rainfall was also reported in North Maharashtra and Pune.

As many as 75,940 people living near the seashore

and landslide prone areas in Mumbai were shifted to safer places by the Brihanmumbai Municipal Corporation. Milind Borikar, the collector of Mumbai Suburban, said that with the help of the civic body, they have evacuated 12,000 people from coastline areas of Mumbai suburbs, land sliding areas and hilly areas to BMC schools.

The flight operations at Chhatrapati Shivaji Maharaj International Airport in Mumbai were kept shut till 7 pm in view of the landfall of cyclone and they restarted at 6 pm. The decision to temporarily shut

the airport was taken after a FedEx flight from Bengaluru made a runway excursion while landing.

"In consultation with AAI, considering the strong crosswinds, it has been decided that no arrivals and departures will take place between 14.30-19.00 hours," an official statement from the Mumbai International Airport Ltd said.

Trees were uprooted across Mumbai with around 117 tree falling incidents reported due to heavy rains and gusty winds. Vehicular movement on the Bandra-Worli Sea Link was also suspended.



Workers clear an uprooted tree that fell on a road in Mumbai on Wednesday after rains and strong winds were triggered by cyclone Nisarga.

— PTI

The Telegraph
04-06-2020

Nisarga harder to predict than Amphan

Mumbai spared

Shorter lifespan, quick evolution

G.S. MUDUR

New Delhi: The severe cyclonic storm named Nisarga that crossed the Maharashtra coast south of Mumbai on Wednesday afternoon had a shorter life span and a trajectory more difficult to predict than Amphan that ravaged Bengal last month, a senior weather scientist said.

Nisarga crossed the coast over Alibaug around 75km south of Mumbai between noon and 2.30pm with wind speeds up to 110kmph and weakened into a cyclonic storm, moving northeastward to hang over interior Maharashtra 90km east of Mumbai by 5.30pm with 60-70kmph winds.

In comparison, Cyclone Amphan's wind speeds during landfall ranged from 130kmph to 160kmph at different places in Bengal. The IMD predicted 1 to 2-metre tidal waves triggered by Nisarga along parts of the Maharashtra coast compared to Amphan's 3 to 4-metre waves in Bengal last month.

Until June 1, weather scientists did not have a clear forecast over where Nisarga would make landfall. The India Meteorological Department forecast had predicted a long stretch of the coast from Raigad in Maharashtra to Daman in Gujarat.

"Arabian Sea cyclones are usually harder to forecast than those in the Bay of Bengal," said Mrutyunjaya Mohapatra, the IMD director-general. "We don't have as much weather data and measurements from the Arabian Sea as



Workers try to remove an uprooted tree that fell on a road in Mumbai on Wednesday after Cyclone Nisarga made landfall along the Maharashtra coast; and (right) a wave strikes a vessel near Mirya embankment at Ratnagiri Narmada Cement Port. (PTI)

we do on the Bay of Bengal side."

With less data, he said, the weather agency had to rely on remote measurements such as satellite-generated information about the state of the sea and atmosphere over the Arabian sea.

However, on May 31, when IMD forecasters observed a low pressure system over the Arabian Sea, they decided to issue a cyclone watch to Maharashtra, in effect taking a chance because they did not have high certainty that a cyclone would emerge.

"I think it's the first time in IMD history that we've issued a cyclone watch when it was

still a low pressure system," Mohapatra said. A low pressure system evolves into a depression, a deep depression, then a cyclone. Earlier cyclone forecasts were issued when they were depressions or deep depressions.

He said Nisarga's quick evolution and short life span also made forecasting its trajectory harder than forecasts for Amphan.

Nisarga was a depression on June 1, a deep depression on June 2, and turned into a cyclone on June 2.

In contrast, Amphan was over the sea for over three days before landfall, the scientist said.

Mumbai: Cyclone Nisarga made landfall near Mumbai on Wednesday but largely spared the city already reeling from the Covid-19 pandemic even as it uprooted trees in nearby Raigad, Palghar and Pune districts and caused at least three deaths.

A 58-year-old man died when a power transformer fell on him while he was rushing home to escape the cyclone's fury at Umate village in Raigad, police said. Two persons died and three were injured in two separate cyclone-related incidents in Pune district, an official said.

The cyclone, which struck two weeks after the cataclysmic Amphan in Bengal, buffeted Maharashtra's coast with wind speeds of up to 120kmph, making landfall at 12.30pm at Alibaug in Raigad near Mumbai. The process was completed by 2.30pm, a senior IMD official said.

Cyclone Nisarga is expected to weaken into a deep depression within the next six hours. Late on Wednesday evening, it lay centred over Pune, the official said.

Mumbaikars and people in neighbouring areas, including those in coastal Gujarat districts, had braced for the cyclone but heaved a sigh of relief as Nisarga's damage appeared largely limited to uprooting trees.

Ahead of the cyclone's landfall, thousands of people in its path had been evacuated, trains rescheduled, flights cancelled, fishermen ordered out of the seas and rescue workers put on standby.

Mumbai, already the worst affected by the pandemic in

the country, would have faced its first major cyclone in 72 years, according to Adam Sobel, a professor of atmospheric science at Columbia University in New York.

Nisarga blew in from the Arabian Sea, making landfall at the coastal town of Alibaug. Steeped in colonial history, Alibaug is a quaint little town located about 110km from Mumbai and is dotted with sandy beaches, forts and temples. Superstar Shah Rukh Khan has a sprawling bungalow in Alibaug. A speedboat takes 20 minutes to reach Mandwa jetty near Alibaug from Mumbai.

The IMD had warned that kuccha houses, trees and electric poles could fall as they might not be able to withstand the speed of the storm. However, as the cyclone weakened into a depression, it was clear that the extent of damage was far less than anticipated.

Pune-based Sucheta Nadkarni, 81, who lived in suburban Vile Parle during the last major cyclone to hit Mumbai in 1948, said: "I remember huge trees in our area were uprooted and plants in our garden destroyed. I was 10 years old then and remember this because my mother was heartbroken as the plants she had lovingly nurtured had been destroyed."

Ahead of Nisarga's landfall, the state government had asked people in vulnerable areas to shift to safer places. The Central Railway rescheduled special trains and many airlines cancelled their Mumbai operations. PTI

