भारत सरकार

Government of India केन्द्रीय जल आयोग

Central Water Commission बाढ़ पूर्वानुमान प्रबोधन निदेशालय

Flood Forecast Monitoring Directorate

Tele/ Fax:

011-26106523, 26105274

e-mail: fmdte@nic.in, ffmcwc@gmail.com

भू तल, विंग 7 , पश्चिमी खण्ड-2, रामाकृष्ण पुरम, नई दिल्ली-110066

विषय : दिनाकं .04.169.120 की समाचार की कतरन (News Clippings) प्रस्तुत करने के सम्बन्ध में ।

मानसून/ बाढ़ सम्बन्धी सनाचारों की कतरन (News Clippings) अवलोकन हेतु प्रस्तुत हैं :

सलंबन: उपरोक्तानुसार

(सहायक निदेशक)

उपनिदेशक पान

निदेशक (बा.पू.प्र.)

210 21-1

दिनाकं 9.3 9.9. ... को निम्नलिखित समाचार पत्र में प्रकाशित मानसून/ बाढ़ सम्बन्धी समाचार

Hindustan Times (Delhi)

नवभारत टाईम्स (दिल्ली)

The Tribune (Chandigarh)

The Hindu (Chennai)

The Assam Tribune (Guwahati)

The Times of India (Mumbai)

The Telegraph (Kolkata)

हिन्दूस्तान (पटना)

The Deccan Hearld (Bengluru)

The Deccan Chronical (Hyderabad)

Central Chronical (Bhopal)

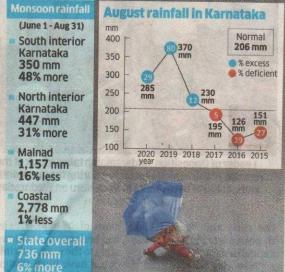
August downpour bridges monsoon deficit gap

AKRAM MOHAMMED BENGALURU, DHNS

he week-long downpour that flooded parts of Karnataka was enough to revive the overall rainfall trend in the state at the end of August.

Torrential downpour in Malnad region - which was facing a deficit of 40% rainfall at the beginning of August - bridged the gap to a 16% deficit (classified as normal) by the end of the month. Overall rainfall for August was 29% above normal.

Malnad region - where flooding and widespread landslides were reported for the third year in a row-received 567 mm rainfall during the month, against a normal of 423 mm. Coastal Karnataka, meanwhile, received 40% excess rainfall, recording 1,153 mm against



a normal of 823 mm rainfall data shows three districts during the month. data shows three districts registered large excess rain-

Karnataka State Natural Disaster Monitoring Cell data shows three districts registered large excess rainfall - 50% more than normal rainfall, while nine districts received excess rainfall - 20 to 50% above normal. Belagavi, where flooding was reported in several pockets, was among the three districts with large excess rainfall.

Belagavi received 285 mm rainfall - 106% more - against a normal of 142 mm for the month. Similarly, Dharwad (241 mm - 102% above normal) and Uttara Kannada (1163 mm - 65% above normal) recorded large excess rainfall.

Considering the rainfall trends since the start of monsoon in June, both south interior Karnataka and north interior Karnataka have received excess rainfall. South interior Karnataka has received 350 mm rainfall during the monsoon season against a normal of 236 mm - 48% above normal, while north interior Karnataka has received 31% above normal rainfall.

दिनाकं १.५. 20 ... को निम्नलिखित समाचार पत्र में प्रकाशित मानसून/ बाढ़ सम्बन्धी समाचार

Hindustan Times (Delhi)

नवभारत टाईम्स (दिल्ली)

The Tribune (Chandigarh)

The Hindu (Chennai)

The Assam Tribune (Guwahati)

The Times of India (Mumbai)

The Telegraph (Kolkata)

हिन्दुस्तान (पटना)

The Deccan Hearld (Bengluru)

The Deccan Chronical (Hyderabad)

Central Chronical (Bhopal)



Tamil Nadu fire and rescue services department officials take part in a flood evacuation drill in Chennai on Thursday.

PT

Monsoon pattern may see rapid shift

Joydeep Thakur

letters@hindustantimes.com

KOLKATA: The pattern of monsoon rainfall in India may see a major shift by the end of this century with southern India likely to register increase in extreme rainfall, researchers from the Indian Institute of Technology (IIT), Kharagpur, in West Bengal, have found.

The researchers also expect rainfall to increase in the Arabian Sea and south-Asian countries, including Myanmar, Thailand and Malaysia.

"In the worst-case scenario of climate change, rainfall could increase by 2.7 mm per day in north India with the Himalayan foothills expected to receive the heaviest rain. In south India, rainfall could increase by 18.5 mm per day with the Western Ghats expected to be affected the most," said Rajib Maity, a professor of civil engineering at IIT Kharagpur, who led the study.

The scenario could play out towards the end of the century, between 2071 and 2100. The researchers analysed data of Indian Summer Monsoon precipitation for close to five decades (1971 – 2017), considering the period between 1930 and 1970 as the base. In meteorological terms, fifty years, the time it will take for the change to mani-

fest itself, isn't much. And the change itself, could have a significant bearing on cropping patterns in a country where much of the agriculture is still rain-fed. "South Asia, as we know, despite advances in irrigation systems, is highly dependent on the monsoons. Results of this study will be useful to the designers of water infrastructure and agricultural communities, especially in the southern parts of India and Himalayan foothills, to prompt a possible change in design criteria and agricultural practices including cropping pattern, Virendra Tewari, director of IIT Kharagpur said, in a statement issued by the institute.

The results have been published in the Scientific Reports journal brought out by Nature publishing group. "Our analysis shows a change in the direction of the southwest monsoon winds blowing towards the east over the Indian Ocean.

This directional change will intensify the already observed precipitation contrast in future between South and North India, and cause more extreme precipitation events in countries such as Myanmar, Thailand and Malaysia' Maity added. The researchers said that the Indian Ocean Dipole — popularly referred to as the 'Indian Nino' because of its similarity to its

Pacific equivalent – is intensifying which could lead to increase in rainfall activity throughout India. The Indian Ocean Dipole refers to the difference in seasurface temperatures in opposite parts of the Indian Ocean which, in turn, affects rainfall patterns.

"The possibility of such a shift can't be ruled out but such projections need more research and analysis as the association between the Indian Ocean Dipole and monsoon is still not well defined," said R Krishnan, executive director, Centre for Climate Change Studies at the Indian Institute of Tropical Meteorology (IITM).

To be sure, over the years, a significant correlation has been established between the Indian Ocean Dipole and the monsoon.

IITM, in various studies, has documented the change in monsoon rainfall pattern and increase in extreme rainfall events since 1871. It has found that the period between 1981 and 2016 witnessed higher frequency of extreme rain during monsoon months. Studies by then IITM professor, M Rajeevan, now secretary ministry of earth sciences, have shown that monsoon rain has increased in western parts of India, namely Rajasthan and Gujarat and has declined in Central and northwestern India.