

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 : fmd@ciwfmw@gmail.com

दूसरा तल, दूसरा विंग (दक्षिण), पश्चिमी खण्ड-2,
रामाकृष्ण पुरम, नई दिल्ली-110066

विषय : दिनांक 15/06/20 की समाचार की कतरन (News Clippings) प्रस्तुत करने के सम्बन्ध में ।

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

सलंगन : उपरोक्तानुसार

Heur 30/06/20
(सहायक निदेशक)

उपनिदेशक

15/6/2020

निदेशक (बा.प.प्र.)

21/06/20
15/06/2020

कृपया केन्द्रीय जल आयोग की वेब साइट पर अपलोड करने की व्यवस्था करें।

निदेशक (तकनीकी प्रलेखन)

दिनांक 15/06/20... को निम्नलि

✓ Hindustan Times (Delhi)
नवभारत टाइम्स (दिल्ली)
The Tribune (Chandigarh)
The Hindu (Chennai)

Extreme weather events on the rise

FIRST REVIEW Rapid changes will stress food, water security: Mo

Jayashree Nandi

jayashree.nandi@htlive.com

NEW DELHI: By the end of the 21st century, the number of warm days and warm nights in India is likely to be 55-70% higher compared to the average number between 1976 and 2005, according to the worst climate change scenario listed in the country's first national climate change assessment by the ministry of earth sciences. And the frequency of summer heat waves is likely to be three to four times higher and their duration, likely to double.

The report, to be released on Tuesday said that between 1986 to 2015, India has recorded several weather extremes — such as an increase in warm days and nights and a rise in extremely severe cyclonic storms over the Arabian Sea — that were a result of human-caused climate change.

Rapid changes in India's climate will put stress on ecosystems, agricultural output and freshwater resources, and also cause damage to infrastructure, the report, available on publishing platform Springer, added.

"These portend serious consequences for the country's biodiversity, food, water and energy security, and public health... higher temperatures, extreme weather events, and higher climate variability have been associated with an elevated risk of heat strokes, cardiovascular and neurological diseases, and stress-related disorders," it said.

Under all climate change scenarios, the extremes will only intensify. For example, temperatures of the warmest day and the coldest night of the year increased by 0.63 degree Celsius and 0.4 degree Celsius, respectively, in the 29-year period.

"India has witnessed a rise in average temperature; a decrease in monsoon precipitation; a rise in extreme temperature and rainfall events, droughts, and sea levels; and an increase in the intensity of severe cyclones, alongside other changes in the monsoon system. There is compelling sci-



■ Cyclone Nisarga hit Mumbai earlier this month. VIJAYANAND GU

entific evidence that human activities have influenced these changes," the report, drafted by scientists from Indian Institute of Tropical Meteorology said.

The number of warm days have increased by about 9.9 per decade and warm nights by 7.7 per decade, it said. Warm days or nights are those when maximum and minimum temperatures are over the 90th percentile.

"Heat action plans need to be developed. We need to track what kind of changes in health impacts we are seeing... In the long term, our infrastructure needs to be heat-resistant or mortality will increase," said Dr Dileep Mavalankar, director, Indian Institute of Public Health Gandhinagar, Gujarat.

India's average temperature has risen by around 0.7 degree Celsius during 1901-2018, which may not reflect these extremes. The largest increase in the annual mean temperature of more than 0.2 degree Celsius per decade was observed in some areas of north India between 1986 and 2015. The warming is much weaker in the south.

With increase in air temperature, sea surface temperature over the Indian Ocean has already risen by 1 degree Celsius in the 64 years between 1951 and 2015 compared to the global average of 0.7 degree Celsius.

"It's a first for India. This report can help policymakers in different sectors. We plan to do this review every four to five

years," said M Rajeevan, secretary, the ministry of earth sciences.

The report has also underlined that climate change has already skewed the monsoon pattern with rains decreasing between 1951 and 2015. The Gangetic Plains and Western Ghats have recorded the highest declines, but the frequency of extreme rainfall (over 150 mm) has increased by 75% between 1950 and 2015 in central India. There is a shift towards more frequent dry spells (27% higher than the 1951-1980 period) and intense wet spells during summer monsoon season. Elevations of the Tibetan Plateau recorded severe warming as high as 0.5 degree Celsius per decade according to the report.

It has warned of a cascade of climate-related hazards, which will overlap. For instance, the region may experience anomalously long or intense summer heat wave followed by intense monsoon floods that alter the monsoon pattern with lengthening dry spells. "Low-lying coastal zones, especially on India's east coast, witness rising sea levels damaging property and increasing groundwater salinity," the report added.

The India Meteorological Department released a detailed report Sunday on Super Cyclone Amphan, which made landfall on May 20. It said tidal waves as high as 15 feet inundated low-lying areas of the Sunderbans.